

[図1]

scFv	T2に対する添加物											
	溶媒	ペプチド										
	DMSO	NY-ESO	1F	2M	3A	4A	5A	6L	7F	8A	9A	gp100
NYA-0001	1.04	5.75	0.60	7.72	7.88	0.83	0.78	7.97	0.97	6.67	6.56	0.43
NYA-1143	0.98	12.90	1.77	11.89	10.20	5.91	3.15	12.92	4.26	8.74	15.12	0.41
NYA-1154	1.02	9.98	3.98	9.49	8.00	6.63	1.12	9.36	6.08	11.95	11.16	0.46
NYA-1163	0.97	3.67	0.53	1.85	1.70	0.57	0.62	1.74	1.11	6.00	4.01	0.44
NYA-2023	0.94	8.85	0.72	6.74	4.92	2.48	1.21	7.51	4.72	5.40	10.79	0.40
NYA-2027	1.09	5.75	0.57	7.84	9.91	0.99	0.75	7.85	5.41	9.47	6.90	0.41
NYA-2035	1.03	9.94	0.60	8.80	5.81	2.16	2.27	8.95	5.83	6.41	11.46	0.38
NYA-2044	0.91	12.93	0.68	13.53	10.90	3.21	2.20	13.39	3.62	10.04	15.61	0.39
NYA-2045	0.81	9.03	0.53	8.8	7.46	1.17	0.94	8.8	1.99	7.35	9.98	0.39
NYA-2047	0.89	7.99	0.48	7.34	6.09	0.86	1.03	7.07	3.11	6.61	9.54	0.39
NYA-2048	0.90	6.58	0.51	5.36	4.20	0.63	0.67	6.14	1.46	4.11	7.75	0.41
NYA-2060	0.83	8.78	0.52	6.93	5.51	0.73	0.70	7.94	2.51	6.18	9.48	0.41
NYA-2061	0.85	8.62	0.54	7.17	4.73	0.59	0.66	7.13	2.04	5.22	9.16	0.40
NYA-2143	1.04	13.06	2.72	13.19	10.28	7.19	4.30	12.87	5.26	9.69	14.50	0.38
NYC-0003	0.92	3.74	3.28	3.73	4.34	0.76	0.69	4.14	3.99	3.42	4.77	0.39
NYC-0004	0.76	6.02	3.56	5.66	4.75	2.02	0.65	3.78	5.07	3.69	7.99	0.37

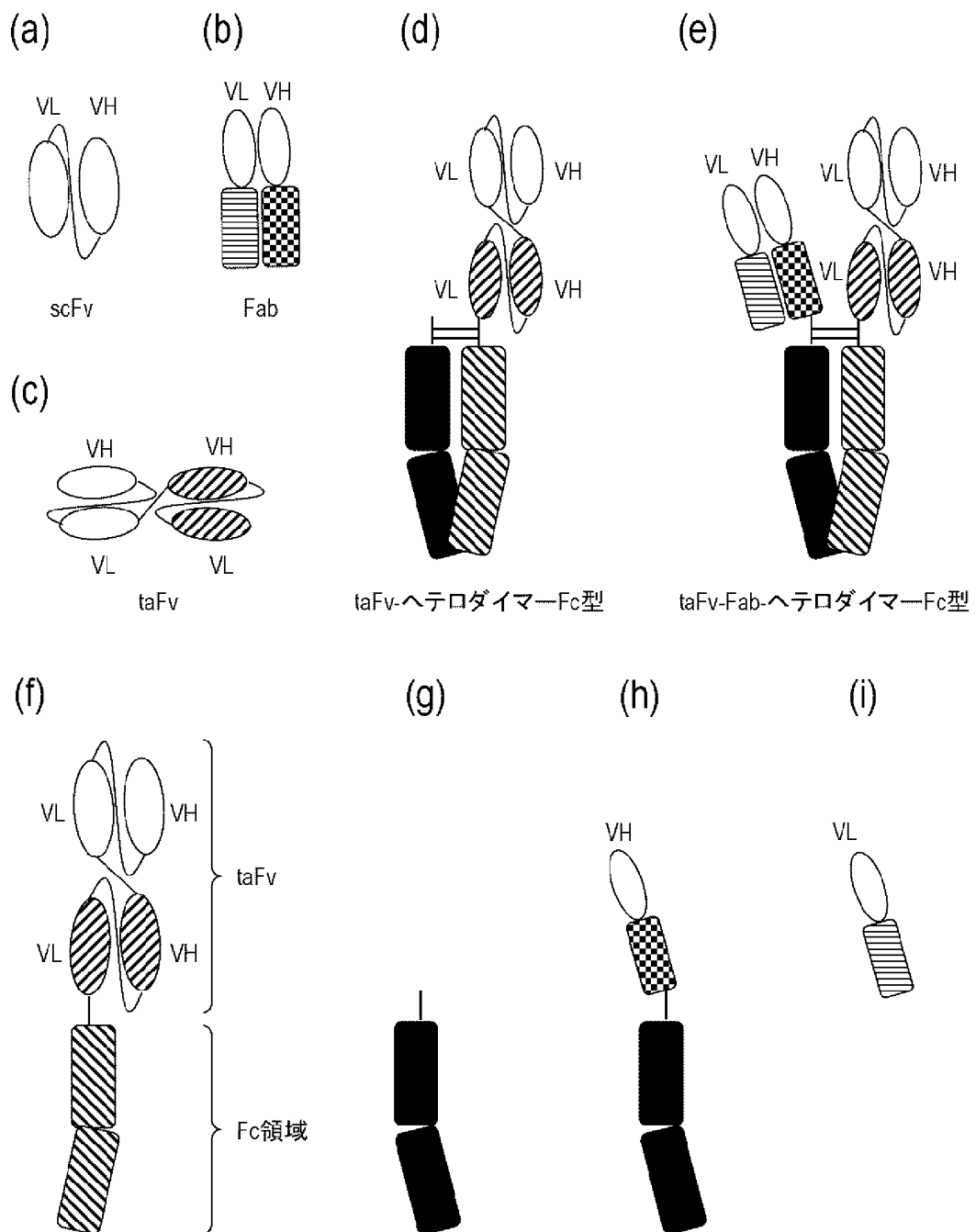
[図2A]

遺伝子名	Uniprot ID	開始位置	配列	HLA-A0201 IC50 (nM)
DOLPP1	Q86YN1	104	SQFMWFFSV	2.64
IL20RB	Q6UXL0	14	SLFMWFFYA	2.95
PRKD1	Q15139	763	SLDMWSVG	14.74
PRKD3	Q94806	756	SLDMWSVG	14.74
PRKD2	Q9BZL6	731	SLDMWSVG	14.74
CD163	Q86VB7	885	SIPMWVDNV	145.66
P2RY8	Q86VZ1	186	SVAMWAVFL	212.86
NY-ESO-1	P78358	157	SLLMWITQC	363.83

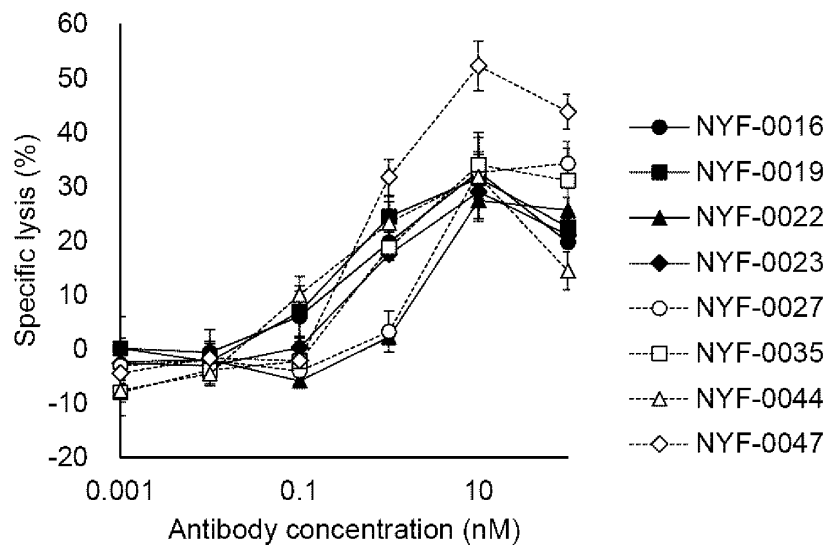
[図2B]

scFv	T2に対する添加物							
	溶媒	ペプチド						
	DMSO	NY-ESO	DOLPP1	IL20RB	PRKD2	CD163	P2RY8	gp100
NYA-0001	0.92	<u>5.12</u>	0.37	0.42	0.33	0.48	0.73	0.31
NYA-1143	0.94	<u>13.44</u>	0.37	0.42	0.32	0.46	0.69	0.30
NYA-1154	1.01	<u>13.76</u>	0.46	0.51	<u>2.72</u>	0.54	0.65	0.31
NYA-1163	0.88	<u>4.21</u>	0.36	0.41	0.31	0.46	0.69	0.30
NYA-2023	0.88	<u>10.11</u>	0.42	0.42	0.42	0.48	0.70	0.30
NYA-2027	0.96	<u>7.25</u>	0.39	0.42	0.32	0.51	0.70	0.31
NYA-2035	0.97	<u>11.14</u>	0.38	0.41	0.33	0.48	0.69	0.29
NYA-2044	0.95	<u>14.28</u>	0.38	0.43	0.33	0.47	0.72	0.32
NYA-2045	0.96	<u>13.84</u>	0.43	0.47	0.34	0.48	0.58	0.30
NYA-2047	0.98	<u>10.25</u>	0.40	0.43	0.35	0.47	0.72	0.30
NYA-2048	0.90	<u>8.82</u>	0.44	0.48	0.35	0.52	0.69	0.34
NYA-2060	0.85	<u>11.17</u>	0.42	0.45	0.33	0.47	0.62	0.32
NYA-2061	0.82	<u>10.37</u>	0.40	0.46	0.33	0.48	0.57	0.32
NYA-2143	0.90	<u>13.48</u>	0.38	0.42	0.32	0.46	0.69	0.31
NYC-0003	1.00	<u>5.22</u>	0.38	0.43	<u>1.53</u>	<u>1.08</u>	<u>2.01</u>	0.32
NYC-0004	1.01	<u>9.19</u>	0.39	0.43	<u>3.41</u>	0.49	<u>1.98</u>	0.32

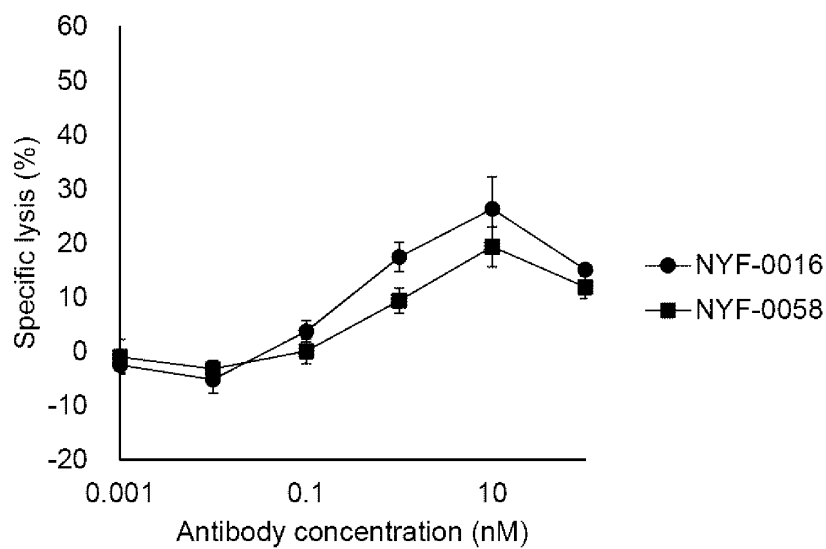
[図3]



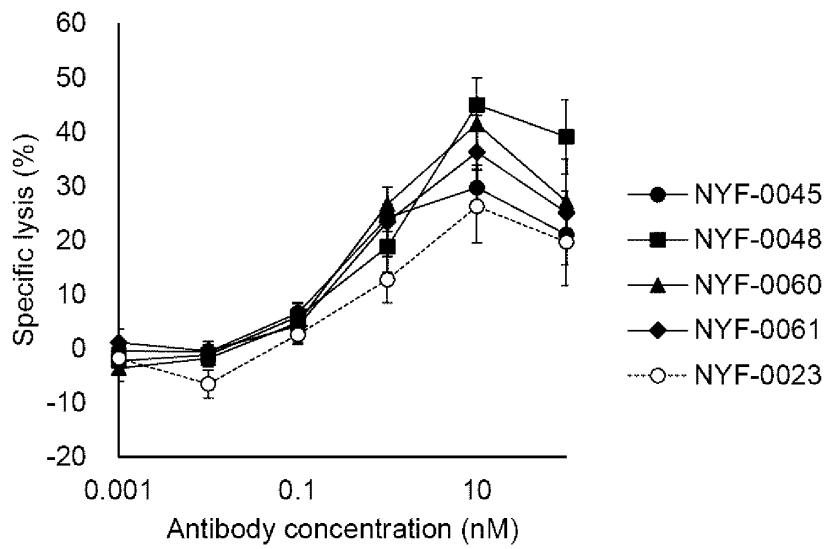
[図4A]



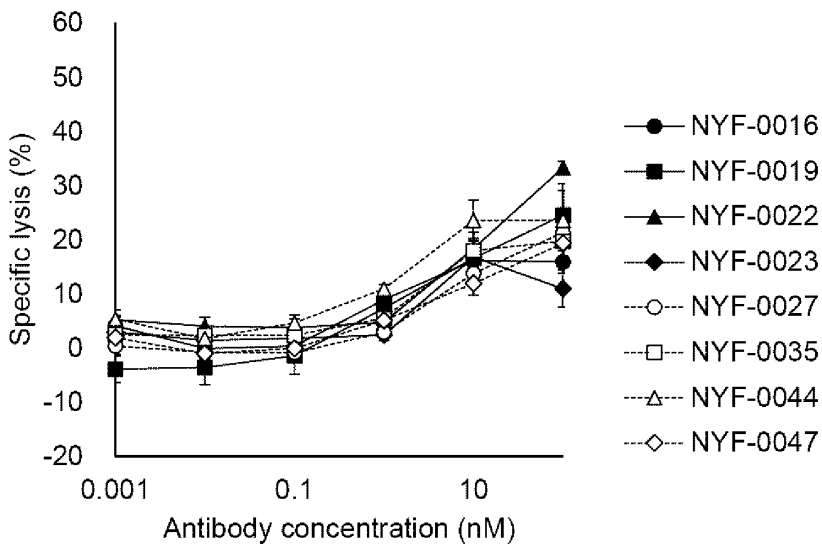
[図4B]



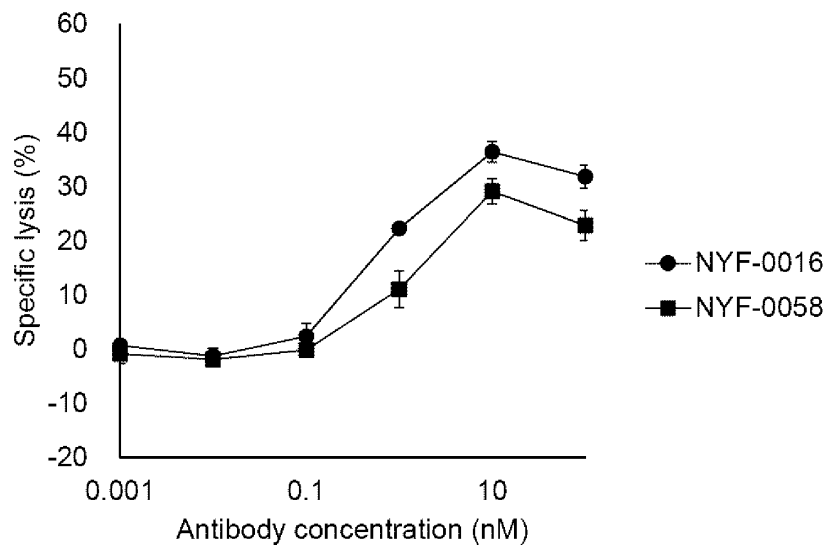
[図4C]



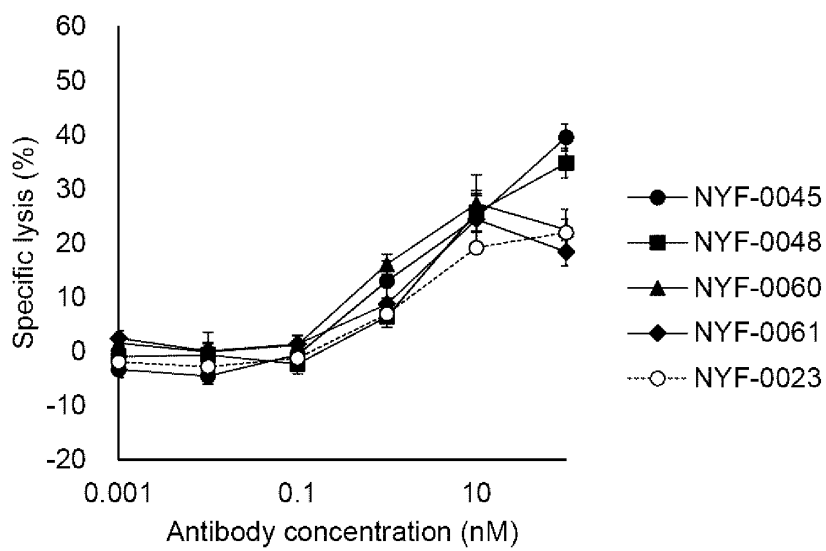
[図4D]



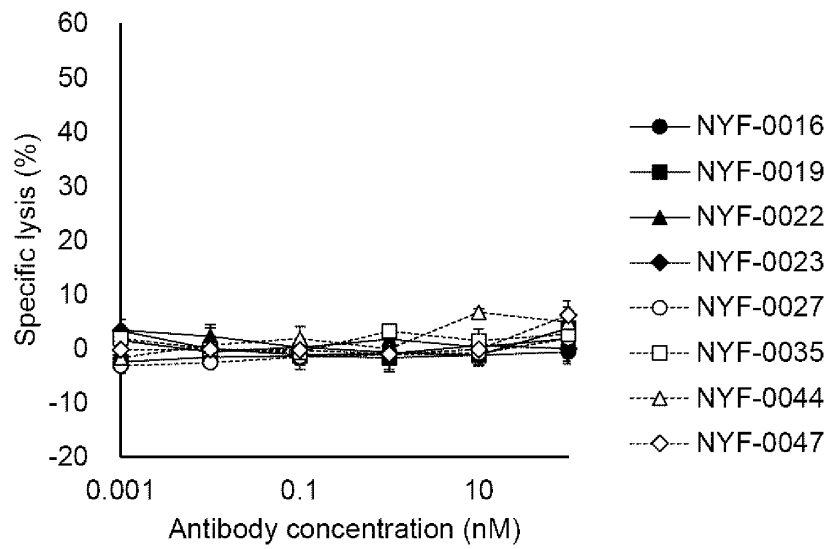
[図4E]



[図4F]



[図4G]



[図4H]

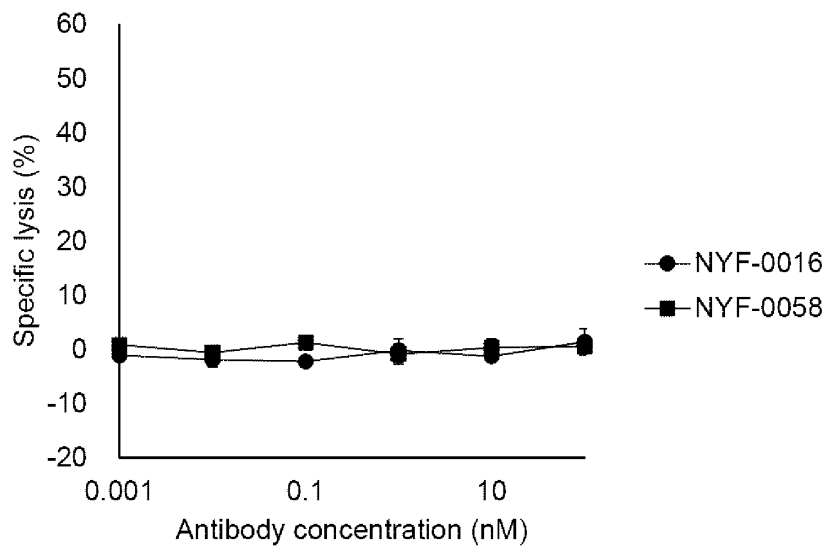


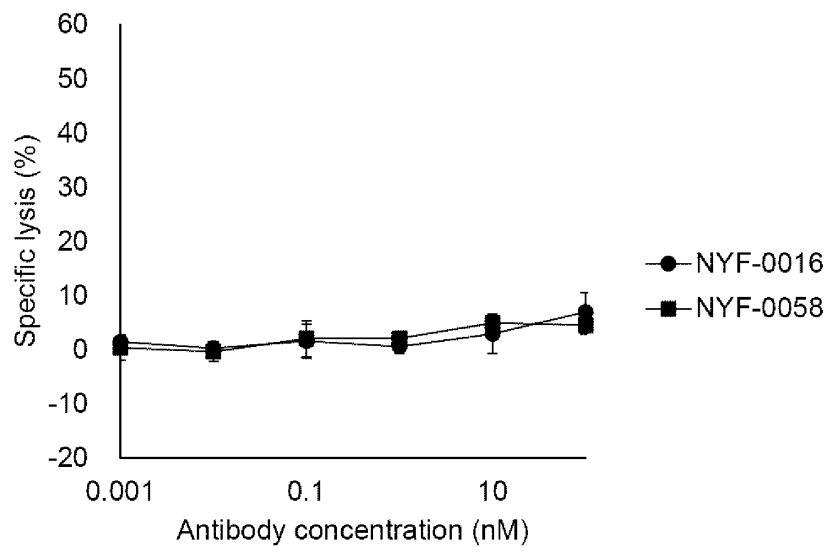
Figure 1 is a line graph showing the specific lysis (%) of various antibodies (NYF-0045, NYF-0048, NYF-0060, NYF-0061, NYF-0023) against antibody concentration (nM). The y-axis ranges from -20 to 60, and the x-axis is logarithmic, ranging from 0.001 to 10 nM. All antibodies show low specific lysis (near 0%) across the tested concentration range.

Antibody concentration (nM)	NYF-0045 (%)	NYF-0048 (%)	NYF-0060 (%)	NYF-0061 (%)	NYF-0023 (%)
0.001	~0	~-2	~0	~0	~2
0.01	~0	~-4	~0	~0	~1
0.1	~0	~0	~0	~0	~-1
1	~0	~-2	~0	~0	~-1
10	~0	~-2	~0	~0	~1
100	~0	~6	~0	~0	~2

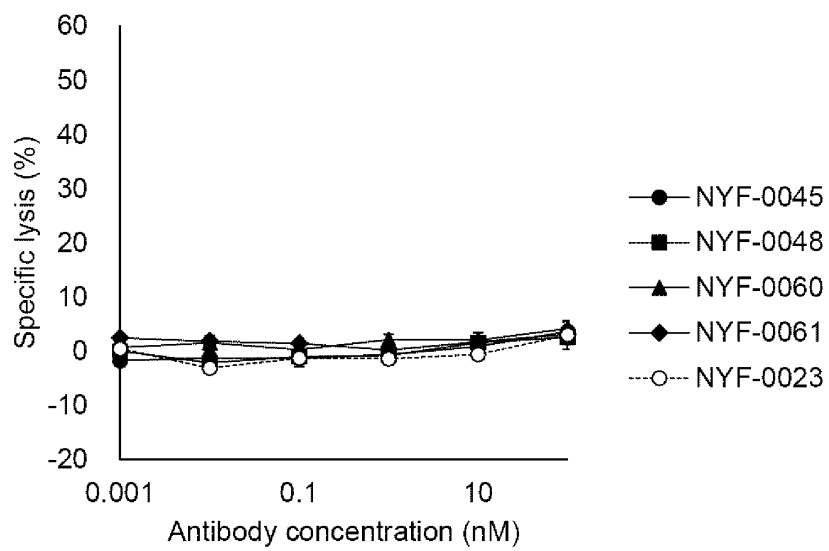
Figure 1 is a line graph showing the specific lysis (%) of various *Yersinia enterocolitica* strains (NYF-0016, NYF-0019, NYF-0022, NYF-0023, NYF-0027, NYF-0035, NYF-0044, NYF-0047) in response to different concentrations of anti-*Yersinia enterocolitica* O:3 antibody (0.001, 0.1, 10 nM). The y-axis represents specific lysis (%) from -20 to 60. The x-axis represents antibody concentration (nM) on a logarithmic scale. Most strains show low specific lysis (below 10%) across all concentrations, with NYF-0027 showing slightly higher lysis at 0.1 nM and 10 nM.

Antibody concentration (nM)	NYF-0016	NYF-0019	NYF-0022	NYF-0023	NYF-0027	NYF-0035	NYF-0044	NYF-0047
0.001	~0	~-5	~0	~0	~2	~0	~0	~0
0.1	~0	~-5	~0	~0	~5	~0	~0	~0
10	~0	~-5	~0	~0	~4	~0	~0	~0

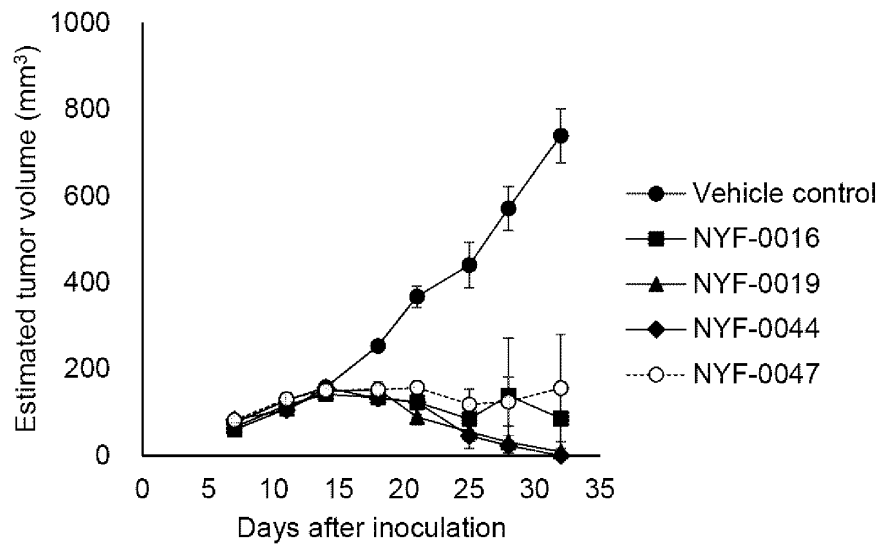
[図4K]



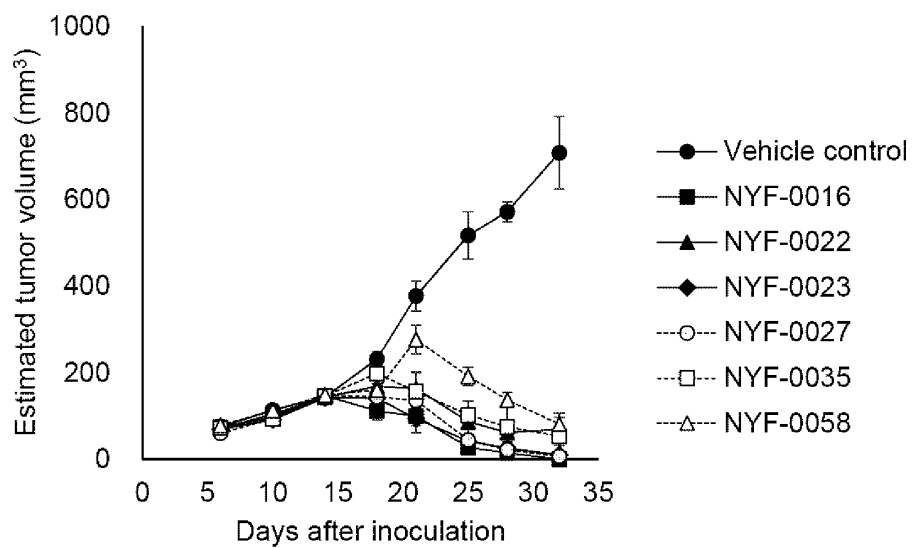
[図4L]



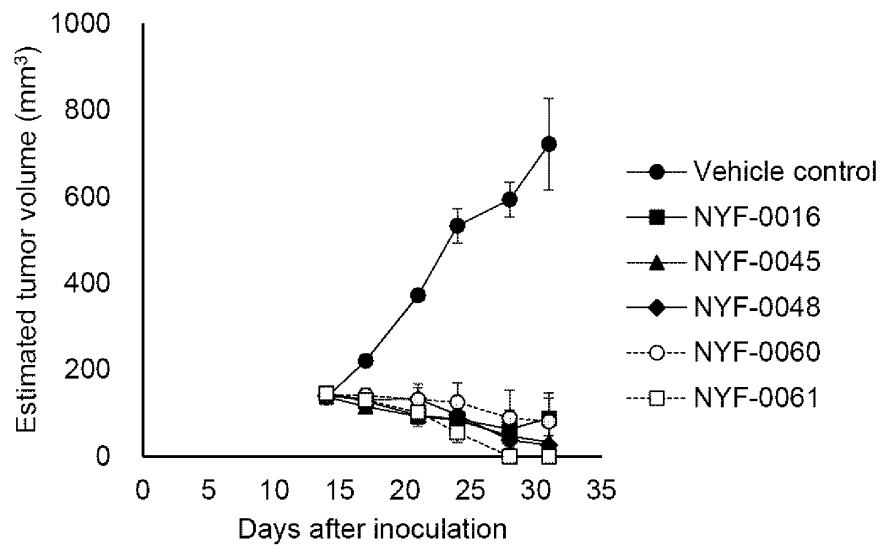
[図5A]



[図5B]

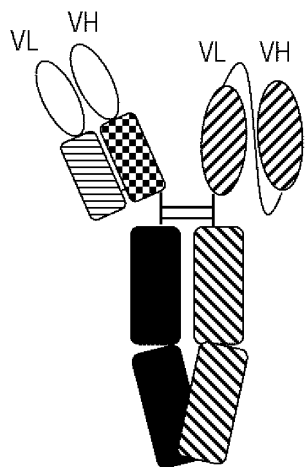


[図5C]



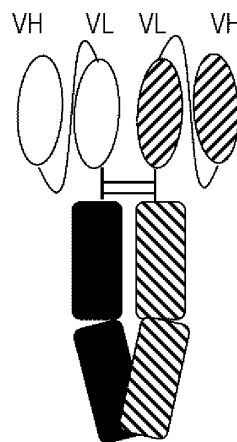
[図6A]

(a)



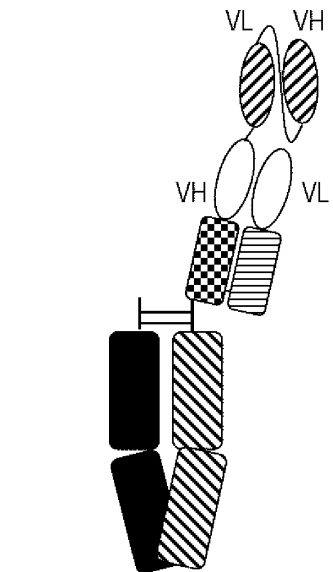
Hybrid型

(b)



Dual型

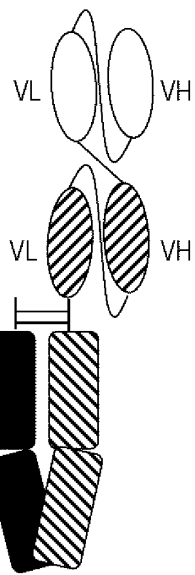
(c)



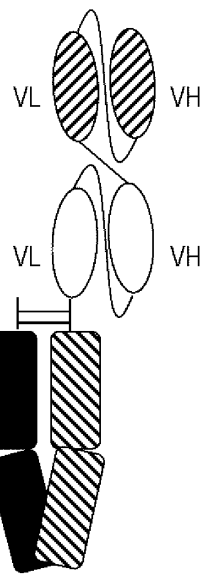
scFv-Fab-ヘテロダイマーFc型

[図6B]

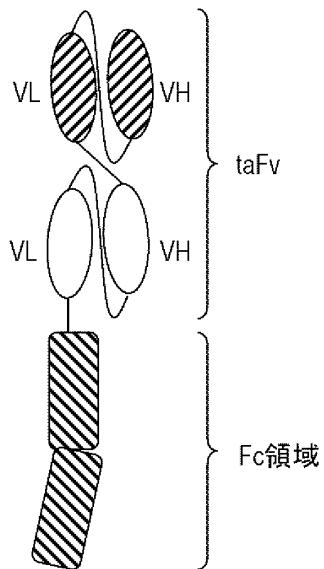
(a)

taFv-ヘテロダイマーFc型
(taFv-Fc型)

(b)

taFv(inversed)-ヘテロダイマーFc型
(taFv(inversed)-Fc型)

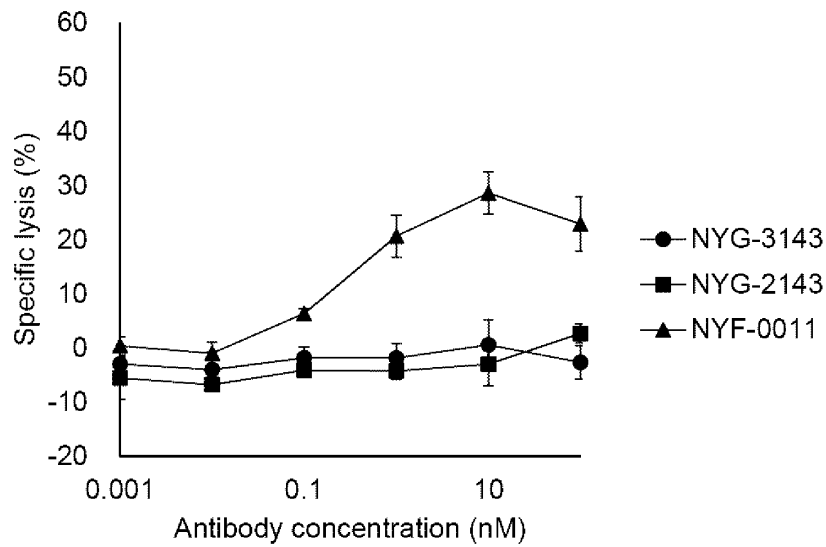
(c)



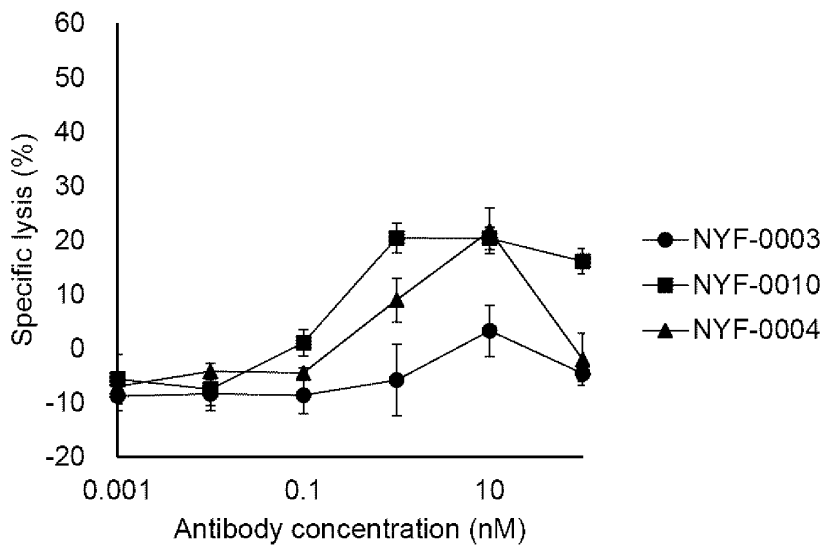
(d)



[図7A]



[図7B]



[図8]

NY-ESO ペプチド
SLLMWITQC
(配列番号1)

[図9]

MAGEC-1 ペプチド
ILFGISLREV
(配列番号2)

[図10]

scFvシーケンス解析用プライマー1
CTCTTCGCTATTACGCCAGCTGGCGA
(配列番号3)

[図11]

scFvシーケンス解析用プライマー2

ATAACAATTTTACACAGGAAACAGCTATGA

(配列番号4)

[図12]

NYA-0001重鎖可変領域

GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAC
ACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGGGTCC
GCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGGAAGT
CAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACGAATC
GGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCTGTTT
ATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGGCCAA
GGGACAATGGTCACCGTCTCTTCA

(配列番号5)

[図13]

NYA-0001重鎖可変領域

EVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRQAPGKGLEWVATISYDGS
QKYFADSVKGRFTIFRDESENMVYLLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQ
GTMVTVSS

(配列番号6)

[図14]

NYA-0001軽鎖可変領域

CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCAC
CATCTCCTGCTCTGGAAGCAGCTCCAACATTGGAATAATTATGTATCCTGGTACC
AGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATGACAATAATAAGCGACCC
TCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGG
CATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATA
GCAGCCTGAGTGCCCCCTTGGGTGTTGCGCGGAGGGACCAAGGTCACCGTCTTA

(配列番号7)

[図15]

NYA-0001軽鎖可変領域

QSVLTQPPSVSAAPGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRP
SGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGTWDSSLAPWVFGGGTKVTVL

(配列番号8)

[図16]

NYA-0060重鎖可変領域

GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAC
ACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGGGTCC
GCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGGAAGT
CAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACGAATC
GGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCTGTTT
ATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGGCCAA
GGGACAATGGTCACCGTCTCTTCA

(配列番号9)

[図17]

NYA-0060重鎖可変領域

EVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRLAPGKGLEWVATISYDGS
QKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQ
GTMVTVSS
(配列番号10)

[図18]

NYA-0060軽鎖可変領域

CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCAC
CATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTACC
AGCAGCTCCCAGGAACAGCCCCAACTCCTCATTTATGACAATAATAAGCGACCC
TCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGG
CATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATA
GCAGCCTGAGTGCCCTTGGGTGTTTCGGCGGAGGGACCAAGGTCACCGTCCTA
(配列番号11)

[図19]

NYA-0060軽鎖可変領域

QSVLTQPPSVSAAPGQKVTIISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRP
SGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVL
(配列番号12)

[図20]

NYA-0068重鎖可変領域

GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAC
ACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGGGTCC
GCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGGAAGT
CAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACGAATC
GGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCTGTTT
ATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGGCCAA
GGGACAATGGTCACCGTCTCTTCA
(配列番号13)

[図21]

NYA-0068重鎖可変領域

EVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRQAPGKGLEWVATISYDGS
QKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQ
GTMVTVSS
(配列番号14)

[図22]

NYA-0068軽鎖可変領域

CAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCAC
CATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTGGTATGTATCCTGGTACC
AGCAGCTCCCAGGAACAGCCCCAACTCCTCATTTATGACAATAATAAGCGACCC
TCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGG
CATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGGGATA
GCAGCCTGAGTGCCCTTGGGTGTTTCGGCGGAGGGACCAAGGTCACCGTCCTA
(配列番号15)

[図23]

NYA-0068軽鎖可変領域

QSVLTQPPSVSAAPGQKVTIISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRP
SGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVL
(配列番号16)

[図24]

NYA-0082重鎖可変領域

GAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGAC
ACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGGGTCC
GCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGGAAGT
CAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACGAATC
GGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCTGTTT
ATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGGCCAA
GGGACAATGGTCACCGTCTCTTCA
(配列番号17)

[図25]

NYA-0082重鎖可変領域

EVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRQAPGKGLEWVATISYDGS
QKYFADSVKGRFTIFRDESENMYVLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQ
GTMVTVSS
(配列番号18)

[図26]

NYA-0082軽鎖可変領域

CAGTCTGTGTTGACGCGAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGGTCAC
CATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGGTACC
AGCGGCTCCCAGGAACAGCCCCAAACTCCTCATTTATGACAATAATAAGCGACCC
TCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTCAGCCACCCTGGG
CATCACCGGACTCCAGACTGGGGACGAGCCGATTATTACTGCGGATCATGGGATA
GCAGCCTGAGTGCCCTTGGGTGTTGCGCGGAGGGACCAAGGTCACCGTCCTA
(配列番号19)

[図27]

NYA-0082軽鎖可変領域

QSVLTQPPSVSAAPGQKVTIISCSGSSSNIGNNYVSWYQRLPGTAPKLLIYDNNKRP
SGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGSWDSSLSAPWVFGGGTKVTVL
(配列番号20)

[図28]

NYA-1163タグ付加体

ATGAAACACCTGTGGTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
TTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATG
ACAATAATAAGCGACCCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGCGCGGCCCGCAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号21) シグナル配列 (1-57)、NYA-1163 (61-798)、FLAG-Hisタグ
(799-876)

[図29]

NYA-2023タグ付加体

ATGAAACACCTGTGGTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGG
GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATG
ACAATAATAAGCGACCCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGCGCGGCCCGCAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号22) シグナル配列 (1-57)、NYA-2023 (61-798)、FLAG-Hisタグ
(799-876)

[図30]

NYA-2027タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGG
GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCAACATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
TTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCAACTCCTCATTTATG
ACAATAATAAGCGACCCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGATCATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGCGCGGCCGCAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号23) シグナル配列 (1-57)、NYA-2027 (61-798)、FLAG-Hisタグ
(799-876)

[図31]

NYA-1143タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCAACATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCAACTCCTCATTTATG
ACAATAATAAGCGACCCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGCGCGGCCGCAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号24) シグナル配列 (1-57)、NYA-1143 (61-798)、FLAG-Hisタグ
(799-876)

[図32]

NYA-2143タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTTCGAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCGGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATG
ACAATAATAAGCGACCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号25) シグナル配列 (1-57)、NYA-2143 (61-798)、FLAG-Hisタグ
(799-876)

[図33]

NYA-1163タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
VYHCARGSSGHYEAFDIWGQTMVTVSSGGGSGGGGSGGGGQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号26) シグナル配列 (1-19)、NYA-1163 (21-266)、FLAG-Hisタグ
(267-292)

[図34]

NYA-2023タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
VYHCARGSSGHYEAFDIWGQTMVTVSSGGGSGGGGSGGGGQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号27) シグナル配列 (1-19)、NYA-2023 (21-266)、FLAG-Hisタグ
(267-292)

[図35]

NYA-2027タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGSWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号28) シグナル配列 (1-19)、NYA-2027 (21-266)、FLAG-Hisタグ
(267-292)

[図36]

NYA-1143タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号29) シグナル配列 (1-19)、NYA-1143 (21-266)、FLAG-Hisタグ
(267-292)

[図37]

NYA-2143タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号30) シグナル配列 (1-19)、NYA-2143 (21-266)、FLAG-Hisタグ
(267-292)

[図38]

NYA-1154タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATGCACTGG
GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCCTGAGAGTTGAGGACACGGCC
GTTTATCACTGTGCGAGAGGGAGTAGTAATCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
TTATGTATCCTGGTACCAGCGGCTCCAGGAACAGCCCCAACTCCTCATTTATG
ACAATAATAAGCGACCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTGAGCCACCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTACTA
CTGCGGAGCATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTGCGGCGAGGGACCA
AGGTCAACCGTCTAGGCGCGGCCGCAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号31) シグナル配列 (1-57)、NYA-1154 (61-798)、FLAG-Hisタグ
(799-876)

[図39]

NYA-1154タグ付加体

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDMHW
VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
VYHCARGSSNHYEAFDIWGQGTMTVTVSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNNYVSWYQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGAWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号32) シグナル配列(1-19)、NYA-1154(21-266)、FLAG-Hisタグ
(267-292)

[図40]

HLA-A*0201 (GenBank: ASA47534.1) トランケート体

MSHSMRYFFTSVSRPGRGEPFRFIAVGYVDDTQFVRFDSDAASQRMERAPRWIEQEG
PEYWDGETRKYKAHSQTHRVDLGTLRGYYNQSEAGSHTVQRMYGCDVGSQDWRFLRG
YHQYAYDYGKDYIALKEDLRSWTAADMAAQTTKHKWEAAHVAEQLRAYLEGTCVEWL
RRYLENGKETLQRTDAPKTHMTHHAVSDHEATLRCWALSFYPAEITLTWQRDGEDQ
TQDTELVEVTRPAGDGTGFKWAAVVPVSGQEQRVYTCVQHEGLPKPLTLRWEGLNDI
FEAQKIEWHE

(配列番号33)

[図41]

β 2- マイクログロビン

MIQRTPKIQVYSRHPAENGKSNFLNCYVSGFHPSDIEVDLLKNGERIEKVEHSDLS
FSKDWSFYLLYYTEFTPTKDEYACRVNHVTLSPKIVKWDRDM

(配列番号34)

[図42]

NYA-2035タグ付加体

ATGAAACACCTGTGGTTCCTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GAAGGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATG
ACAATAATAAGCGACCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTGAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTACCCGTCTTAGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号35) シグナル配列(1-57)、NYA-2035(61-798)、FLAG-Hisタグ
(799-876)

[図43]

NYA-2035タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
VYHCARGSSSGHYEAFDIWGQGTMTVTVSSGGGGSGGGSGGGSGSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWKVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号36) シグナル配列(1-19)、NYA-2035(21-266)、FLAG-Hisタグ
(267-292)

[図44]

NYA-1143-VH01

EVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHWVRLAPGKGLEWVATISYDGS
QKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTAVYHCARGSSSGHYEAFDIWGQ
GTLVTVSS

(配列番号37)

[図45]

NYA-1143-VH02

QVQLVESGGGVVQPGRSLRLSCAASGFSIRSYDMHWVRQAPGKGLEWVATISYDGS
QKYYADSVKGRFTISRDNKNTLYLQMNSLRAEDTAVYHCARGSSSGHYEAFDIWGQ
GTLVTVSS

(配列番号38)

[図46]

NYA-1143-VH03

EVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHWVRQAPGKGLEWVATISYDGS
QKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTAVYHCARGSSSGHYEAFDIWGQ
GTLVTVSS

(配列番号39)

[図47]

NYA-1143-VL01

QSVLTQPPSASGTPGQRVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRP
SGVPDRFSGSKSGTSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVL

(配列番号40)

[図48]

NYA-2044タグ付加体

ATGAAACACCTGTGGTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
GTCCGACTCGCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTTACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGCAGCG
CCTGGACAGAAGGTCAAAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCCAAGTGAATCCCTGACAGATTTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTACCCCTGGGTATCACCAGGATTGCAGACCGGAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
AGGTTACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGCGCATCACCATCATCACCAC

(配列番号41) シグナル配列 (1-57)、NYA-2044 (61-798)、FLAG-Hisタグ
(799-876)

[図49]

NYA-2045タグ付加体

ATGAAACACCTGTGGTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
GTCCGACTCGCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTTACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCTCTGGCACC
CCGGGCCAACGGGTCAAAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCCAAGTGAATCCCTGACAGATTTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
AGCTGACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGCGCATCACCATCATCACCAC

(配列番号42) シグナル配列 (1-57)、NYA-2045 (61-798)、FLAG-Hisタグ
(799-876)

[図50]

NYA-2047タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTCAAGTACAGCTGGTGGGAATCCGGTGGAGGCGTGGTCCAGCCGGGACGCAGCT
TGAGACTGTCCTGCGCTGCATCTGGCTTTTCCATACGATCCTACGATATGCACTGG
GTTTCGCCAAGCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
GTCTCAGAAATATTACGCGGATTTCAGTGAAGGGGCGGTTTCACAATTTACGGGACA
ATTCAAAGAATACCTTGTATCTCCAGATGTCTTCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCTTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGCAGCG
CCTGGACAGAAGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGGCCAGTGGGAATCCCTGACAGATTTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTACCCTGGGTATCACCGGATTGCAGACCGGAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
AGGTTACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号43) シグナル配列(1-57)、NYA-2047(61-798)、FLAG-Hisタグ
(799-876)

[図51]

NYA-2048タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGACAAGTTCAACTCGTGGGAATCTGGTGGAGGGGTGGTACAACCAGGCCGGTAC
TTAGACTGTCCTGCGCTGCGAGTGGATTTTCCATCAGATCTTACGACATGCACTGG
GTTTCGCCAAGCACCCGAAAGGGTTTGAATGGGTGGCTACGATCTCCTACGATGG
ATCCCAGAAGTATTACGCCGACAGCGTCAAGGGCCGATTTACAATATCACGGGACA
ATTCAAAGAATACCTTGTATCTCCAGATGTCTTCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCTTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCTCTGGCACC
CCGGGCCAACGGGTACACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGGCCAGTGGAGTTCTCTGACAGATTTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
AGCTGACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号44) シグナル配列(1-57)、NYA-2048(61-798)、FLAG-Hisタグ
(799-876)

[図52]

NYA-2060タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
GTCCGACAAGCCCCCTGGCAAAGGTCTTGAATGGGTGGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTCAGTGAAGGGGCGGTTCACAATTTACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGACGCG
CCTGGACAGAAGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCCCAGTGGGAATCCCTGACAGATTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTACCCTGGGTATCACCGGATTGCAGACCGGAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTCGGCGGAGGTACTA
AGGTTACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号45) シグナル配列 (1-57)、NYA-2060 (61-798)、FLAG-Hisタグ
(799-876)

[図53]

NYA-2061タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
GTCCGACAAGCCCCCTGGCAAAGGTCTTGAATGGGTGGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTCAGTGAAGGGGCGGTTCACAATTTACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCTCTGGCACC
CCGGGCGCAACGGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCCCAGTGGAGTTCTTGACAGATTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTCGGCGGAGGTACTA
AGCTGACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGAC
GATAAAGGTGCAGCGGCGCATCACCATCATCACCAC

(配列番号46) シグナル配列 (1-57)、NYA-2061 (61-798)、FLAG-Hisタグ
(799-876)

[図54]

NYA-2044タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
VRLAPGKGLEWVATISYDGSQKYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
VYHCARGSSGHYEAFDIWQGTLVTVSSGGGSGGGGSGGGGQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号47) シグナル配列 (1-19)、NYA-2044 (21-266)、FLAG-Hisタグ
(267-292)

[図55]

NYA-2045タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
VRLAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
VYHCARGSSGHYEAFDIWGQGTLLVTVSSGGGSGGGGSGGGGSGSVLTQPPSASGT
PGQRTVITSCGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号48) シグナル配列(1-19)、NYA-2045(21-266)、FLAG-Hisタグ
(267-292)

[図56]

NYA-0082

EVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRQAPGKGLEWVATISYDGS
QKYFADSVKGRFTIFRDESENMYVLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQ
GTMVTVSSGGGSGGGGSGGGGSGSVLTQPPSVSAAPGQKVTISCSGSSSNIGNNY
VSWYQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKSGTSATLGITGLQTGDEADYYC
GSWDSSLSAPWVFGGGTKVTVL

(配列番号49)

[図57]

NYA-2047タグ付加体

MKHLWFFLLLVAAPRWVLSGQVQLVESGGGVVQPGRSLRLSCAASGFSIRSYDMHW
VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDNKNTLYLQMSSLRAEDTA
VYHCARGSSGHYEAFDIWGQGTLLVTVSSGGGSGGGGSGGGGSGSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号50) シグナル配列(1-19)、NYA-2047(21-266)、FLAG-Hisタグ
(267-292)

[図58]

NYA-2048タグ付加体

MKHLWFFLLLVAAPRWVLSGQVQLVESGGGVVQPGRSLRLSCAASGFSIRSYDMHW
VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDNKNTLYLQMSSLRAEDTA
VYHCARGSSGHYEAFDIWGQGTLLVTVSSGGGSGGGGSGGGGSGSVLTQPPSASGT
PGQRTVITSCGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号51) シグナル配列(1-19)、NYA-2048(21-266)、FLAG-Hisタグ
(267-292)

[図59]

NYA-2060タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
VYHCARGSSGHYEAFDIWGQGTLLVTVSSGGGSGGGGSGGGGSGSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号52) シグナル配列(1-19)、NYA-2060(21-266)、FLAG-Hisタグ
(267-292)

[図60]

NYA-2061タグ付加体

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSVDIHW
VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
VYHCARGSSGHYEAFDIWGQGLVTVSSGGGGSGGGGSGGGGSQSVLTQPPSASGT
PGQRTVITSCGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGAAAGAGGDYKDDD
DKGAAAHHHHHH

(配列番号53)シグナル配列(1-19)、NYA-2061 (21-266)、FLAG-Hisタグ
(267-292)

[図61]

NYA-0001-CDRH1	GFSIRSVD
NYA-0001-CDRH2	ISYDGSQK
NYA-0001-CDRH3	ARGSSGHYEAFDI
NYA-0001-CDRL1	SSNIGNNY
NYA-0001-CDRL2	DNN
NYA-0001-CDRL3	GTWDSSLSAPWV

(配列番号54～59)

[図62]

NYA-2023-CDRL1
SSNIGNWY
(配列番号60)

[図63]

NYA-2027-CDRL3
GSWDSSLSAPWV
(配列番号61)

[図64]

NYA-1154-CDRH3	ARGSSNHYEAFDI
NYA-1154-CDRL3	GAWDSSLSAPWV

(配列番号62及び63)

[図65]

NYA-0035-CDRL1
SSNIGNWK
(配列番号64)

[図66]

NYC-0003タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGCGAAGTCCAGCTGTTGGAGTCAGGTGGCGGATTGGTGCAACCTGGCGGGTCAC
 TGAGGCTGAGTTGTGCAGCTAGCGGCTTCACATTCTCTACGTATCAGATGAGCTGG
 GTGAGACAGGCTCCAGGAAAGGGTCTGGAATGGGTGAGCGGGATTGTGTCTAGCGG
 TGGCTCCACTGCCTATGCCGATAGCGTAAAAGGCCGCTTTACGATCTCTCGGGACA
 ACTCTAAGAACACACTCTATCTGCAGATGAATTCCCTTAGAGCCGAAGATACCGCC
 GTGTACTACTGTGCTGGGGAAGTCTCCCGTATTACGGTATGGACGTTTGGGGCCA
 AGGCACCACTGTACAGTGAGTTCGGTGGAGGCGGGTCAGGCGGAGGCGGGTAGTG
 GAGGTGGAGGATCACAAAGCGAGCTGACACAGCCTAGGTCCGTATCCGGAAGTCCA
 GGGCAGAGCGTCACCATCAGCTGCACTGGCACCTCTCGAGATGTCGGCGGATACAA
 CTACGTGTCTTGGTATCAGCAGCATCCCGGCAAAGCGCCCAAACCTCATCATACAG
 ACGTGATTGAGCGGTCCAGTGGGGTTCCTCGATCGTTTCAGCGGGTCAAAGTCCGGA
 AATACCGCAAGCCTGACCATTTCTGGGCTTCAGGCAGAGGATGAGGCTGACTACTA
 CTGCTGGTCTTTTGGCGGGAGCTATTACGTGTTTGGGACAGGGACTGACGTGACTG
 TTCTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGACGATAAAGGT
 GCAGCGGCGCATCACCATCATCACCAC

(配列番号65) シグナル配列(1-57)、NYC-0003(61-789)、FLAG-Hisタグ
 (789-867)

[図67]

NYC-0004タグ付加体

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGCGAAGTCCAGCTGTTGGAGTCAGGTGGCGGATTGGTGCAACCTGGCGGGTCAC
 TGAGGCTGAGTTGTGCAGCTAGCGGCTTCACATTCTCTACGTATCAGATGAGCTGG
 GTGAGACAGGCTCCAGGAAAGGGTCTGGAATGGGTGAGCGGGATTGTGTCTAGCGG
 TGGCTCCACTGCCTATGCCGATAGCGTAAAAGGCCGCTTTACGATCTCTCGGGACA
 ACTCTAAGAACACACTCTATCTGCAGATGAATTCCCTTAGAGCCGAAGATACCGCC
 GTGTACTACTGTGCTGGGGAAGTCTCCCGTATTACGGTATGGACGTTTGGGGCCA
 AGGCACCACTGTACAGTGAGTTCGGTGGAGGCGGGTCAGGCGGAGGCGGGTAGTG
 GAGGTGGAGGATCACAAAGCGAGCTGACACAGCCTAGGTCCGTATCCGGAAGTCCA
 GGGCAGAGCGTCACCATCAGCTGCACTGGCACCGAGCGAGATGTCGGCGGATACAA
 CTACGTGTCTTGGTATCAGCAGCATCCCGGCAAAGCGCCCAAACCTCATCATACAG
 ACGTGATTGAGCGGTCCAGTGGGGTTCCTCGATCGTTTCAGCGGGTCAAAGTCCGGA
 AATACCGCAAGCCTGACCATTTCTGGGCTTCAGGCAGAGGATGAGGCTGACTACTA
 CTGCTGGTCTTTTGGCGGGGGCTATTACGTGTTTGGGACAGGGACTGACGTGACTG
 TTCTGGGCGCGGCCGAGGTGCAGGTGGTGATTACAAAGATGATGACGATAAAGGT
 GCAGCGGCGCATCACCATCATCACCAC

(配列番号66) シグナル配列(1-57)、NYC-0004(61-789)、FLAG-Hisタグ
 (789-867)

[図68]

NYC-0003タグ付加体

MKHLWFFLLLVAAPRWVLSGEVQLLESGGGLVQPGGSLRLSCAASGFTTFSTYQMSW
 VRQAPGKGLEWVSGIVSSGGSTAYADSVKGRFTISRDNKNTLYLQMNSLRAEDTA
 VYYCAGELLPPYGMVWGQGTITVTVSSGGGSGGGGSGGGGSGQSELTQPRSVSGSP
 GQSVTISCTGTSRDVGGYNYVSWYQQHFGKAPKLIHDTVIERSSGVPDFRFSKSG
 NTASLTISGLQAEDEADYYCWSFAGSYVFGTGTDTVTLGAAAGAGGDYKDDDDKG
 AAAHHHHHH

(配列番号67) シグナル配列(1-19)、NYC-0003(21-263)、FLAG-Hisタグ
 (264-289)

(配列番号68) シグナル配列(1-19)、NYC-0004(21-263)、FLAG-Hisタグ(264-289)

(配列番号69) シグナル配列(1-57)、NYA-0001(61-798)、FLAG-Hisタグ(799-876)

(配列番号70) シグナル配列(1-19)、NYA-0001(21-266)、FLAG-Hisタグ(267-292)

[図72]

HC1

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGACAAAACCTCACACATGCCACCCCTGCCAGCACCTGAAGCCGCAGGGGGACCCCT
CAGTCTTCCTCTTCCCCCAAAACCCAAGGACACCCCTCATGATCTCCCGGACCCCT
GAGGTCACATGCGTGGTGGTGTGTCAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGC
AGTACAACAGCACGTACCGGGTGGTCAGCGTCCCTACCGTCCTGCACCAGGACTGG
CTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCAT
CGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGC
TGCCCCCATCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGCTGTGCCTGGTC
AAAGGCTTCTATCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGA
GAACAACCTACCTGACCTGGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTC
TCCCGGCAAG

(配列番号71) シグナル配列 (1-57)、Hinge (58-87)、CH2 (88-417)、
CH3 (418-738)

[図73]

NYF-0016-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCAGCTCCAGGAACAGCCCCAAACTCCTCATTTATG
ACAATAATAAGCGACCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTGAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTACCGTCTTAGGGGGAGGCGGTTTCAGAAAGTGCAGCTGGTGGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGCGAGGAACCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACTTTATGCTCACTCAGCC
GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCCACCCTGCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCCTCACCGTCTGCAACAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGTGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号72)シグナル配列(1-57)、NYA-1143(61-798)、linker(799-
813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図74]

NYF-0019-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGACAGCTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCGGCTCCAGGAACAGCCCCAACTCCTCATTATG
ACAATAATAAGCGACCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTGAGCCACCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTGCGCGGAGGGACCA
AGGTCACCGTCTAGGGGGAGGCGGTTGAGAAGTGCAGCTGGTGGAATCCGGGGGG
GGCCTGGTGCAGCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGCAGGGAACCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCCACCCTGCCAGCACCTGAAGCCGCAGGGGGACCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCATCCCCGG
ACGAGCTGACCAAGAACCAGGTGAGCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG

(配列番号73) シグナル配列(1-57)、NYA-2143(61-798)、linker(799-813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2235)

[図75]

NYF-0022-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
TTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCAAAACCTCCTCATTATG
ACAATAATAAGCGACCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCCTAGGGGGAGGCGGTTCAGAAGTGCAGCTGGTGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGCAGGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAATAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCTGCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACCACAGGTGTACGTGTACCCCCCATCCCCGG
ACGAGCTGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号74) シグナル配列(1-57)、NYA-1163(61-798)、linker(799-
813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図76]

NYF-0023-HC2

ATGAAACACCTGTGGTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTTCTGAGCTCTGGATTCTCCATCCGTAGTTATGATATACACTGG
GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCAACATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATG
ACAATAATAAGCGACCCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGGGGAGGCGGTTTCAGAAAGTGCAGCTGGTGGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTTCAAAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCCTATTGGGGGCAGGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTATGCTCACTCAGCC
GTCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAAATA
CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAAGCGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCCTGCCAGCACCTGAAGCCGCAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCCGG
ACGAGCTGACCAAGAACCAGGTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGTCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号75) シグナル配列(1-57)、NYA-2023(61-798)、linker(799-
813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図77]

NYF-0027-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGG
GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCAACATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
TTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCAAAACCTCCTCATTATG
ACAATAATAAGCGACCCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGATCATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCA
AGGTCACCGTCTTAGGGGGAGGCGGTTTCAAGAGTGCAGCTGGTGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGAGGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAAGCGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCTGCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGAGGTTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTGCTGACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACCAGGTACGCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号76) シグナル配列(1-57)、NYA-2027(61-798)、linker(799-
813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図78]

NYF-0035-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
 TGACACCCCTCCTGTTTCTGAGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
 GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
 AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
 AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
 GTTTTACTACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
 CCAAGGGACAATGGTCAACGCTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
 GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
 CCAGGACAGAAGGTCAACATCTCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
 GAAGGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCAACTCCTCATTTATG
 ACAATAATAAGCGACCCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
 ACGTCAGCCACCCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
 CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTTGGCGGAGGGACCA
 AGGTCACCGTCTTAGGGGGAGGCGGTTTCAAGTGCAGCTGGTGGAAATCCGGGGGG
 GGCTTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
 ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
 GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
 GGCAGGTTTACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
 TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
 GGTGGGTTCGCTATTGGGGGCAGGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
 GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGTTCAAACCTTTATGCTCACTCAGCC
 GTCTCTGTCTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
 CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACAGCT
 CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCCTCAGGGGTCCCTGACCGATT
 TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
 AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
 GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
 ATGCCCACCCTGCCCAGCACCTGAAGCCGACAGGGGGACCCCTCAGTCTTCTCTTCC
 CCCCCAAAACCAAGGACACCCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTG
 GTGGTGTGAGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
 CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
 ACCGGGTGGTCAGCGTCTCACCGTCTGACCCAGGACTGGCTGAATGGCAAGGAG
 TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
 CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
 ACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
 AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
 CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
 TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
 GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
 (配列番号77)シグナル配列(1-57)、NYA-2035(61-798)、linker(799-
 813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
 1584)、CH2(1585-1914)、CH3(1915-2235)

[図79]

NYF-0044-HC2

ATGAAACACCTGTGGTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTGCTGAG
 CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
 TGCAGCTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCGAGCTCGCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTTACAGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCTTTGATATATGGGG
 CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGCAGCG
 CCTGGACAGAAGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
 GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
 ACAACAACAAACGGCCAGTGGGAATCCCTGACAGATTTCAGTGGGTCTAAAAGTGGT
 ACAAGCGCTACCCCTGGGTATCACCGGATTGCAGACCGGAGATGAGGCGGACTATTA
 TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
 AGGTTACCGTCTTGGGAGGAGGCGGTTTCAAGAGTGCAGCTGGTGGAAATCCGGGGGG
 GGCTTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
 ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
 GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
 GGCAGGTTCAAAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
 TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
 GGTGGGTGCGCTATTGGGGGCGAGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
 GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
 GTCCTCTGTTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
 CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
 CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
 TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
 AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
 GGAACCTAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
 ATGCCACCCCTGCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
 CCCCCAACCCAAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
 GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
 CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
 ACCGGGTGGTCAGCGTCTCACCCTCTGCACCAGGACTGGCTGAATGGCAAGGAG
 TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
 CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCCGG
 ACGAGCTGACCAAGAACCAGGTACGCTGACCTGCCTGGTCAAAGGCTTCTATCCC
 AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
 CACCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
 TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
 GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG

(配列番号78) シグナル配列(1-57)、NYA-2044 (61-798)、linker(799-813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2235)

[図80]

NYF-0045-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCAATTGG
GTCCGACTCGCCCCCTGGCAAAGGTCTTGAATGGGTGGCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTCAGTGAAGGGGCGGTTTCAAAATTCACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCCTCTGGCACC
CCGGGCCAACGGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCAGTGGAGTTCTTGACAGATTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
AGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGTGCAGCTGGTGGAAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGGCAGGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCTCTGTTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAAGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCTGCCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号79)シグナル配列(1-57)、NYA-2045(61-798)、linker(799-
813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図81]

NYF-0047-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCAGATGGGTGCTGAG
CGGTCAAGTACAGCTGGTGGGAATCCGGTGGAGGCGTGGTCCAGCCGGGACGCAGCT
TGAGACTGTCCTGCGCTGCATCTGGCTTTTCCATACGATCCTACGATATGCACTGG
GTTCCGCAAGCCCCCTGGCAAAGGTCTTGAATGGGTGGCCACTATCTCCTACGACGG
GTCTCAGAAATATTACGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTTACGGGACA
ATTCAAAGAATACCTTGTATCTCCAGATGTCTTCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCCTCAGGCCACTACGAGGCCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGCAGCG
CCTGGACAGAAGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCCCAGTGGGAATCCCTGACAGATTTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTACCCTGGGTATCACCGGATTGCAGACCGGAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTCGGCGGAGGTACTA
AGGTTACCGTCTTGGGAGGAGGCGGTTTCAAGAGTGCAGCTGGTGGGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCAAAATTTCCCGCGAGAACACACAGAAAACTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGACAGGAACCCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTATGCTCACTCAGCC
GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAATAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCCTGCCAGCACCTGAAGCCGCAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCCGGG
ACGAGCTGACCAAGAACCAGGTGAGCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACCTACAAGAC
CACCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG

(配列番号80) シグナル配列(1-57)、NYA-2047(61-798)、linker(799-813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2235)

[図82]

NYF-0048-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGACAAGTTCAACTCGTGGAATCTGGTGGAGGGGTGGTACAACCAGGCCGGTCAC
TTAGACTGTCCTGCGCTGCGAGTGGATTTTCCATCAGATCTTACGACATGCACTGG
GTTTCGCCAAGCACCCGAAAGGGTTTGGAAATGGGTGGCTACGATCTCCTACGATGG
ATCCCGAAGTATTACGCCGACAGCGTCAAGGGCCGATTTACAATATCACGGGACA
ATTCAAAGAATACCTTGTATCTCCAGATGTCTTCACTGAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCTCTGGCACC
CCGGGCCAACGGGTCAACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCAGTGGAGTTCCTGACAGATTCAAGTGGGTCTAAAAGTGGT
ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCCGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
AGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGTGCAGCTGGTGGAAATCCGGGGGG
GGCCTGGTGAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTCGCCTATTGGGGGCGAGGAACCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACTTTATGCTCACTCAGCC
GTCCTCTGTTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCCCACCCTGCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTCAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号81)シグナル配列(1-57)、NYA-2048(61-798)、linker(799-
813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図83]

NYF-0060-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGTGAGGTACAGCTGGTGGAAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
 TGGGACTCTCTTGGCGCCGATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCCGACAAGCCCCCTGGCAAAGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTCACTGAAGGGGCGGTTTCACAATTTACAGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCTTCAGGCCACTACGAGGCCTTTGATATATGGGG
 CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGCAGCG
 CCTGGACAGAAGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
 GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
 ACAACAACAAACGGCCCCAGTGGAATCCCTGACAGATTCACTGGGTCTAAAAGTGGT
 ACAAGCGCTACCCTGGGTATCACCGGATTGCAGACCGGAGATGAGGCGGACTATTA
 TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
 AGGTTACCGTCTTGGGAGGAGGCGGTTTCAAGAGTGCAGCTGGTGGAAATCCGGGGGG
 GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
 ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
 GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
 GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
 TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
 GGTGGGTCGCCTATTGGGGGAGGGAACCTGGTGACAGTCACTCCGGAGGAGGA
 GGATCTGGCGGAGGAGGAGTGGGGGAGGCGGGTCAAACTTTATGCTCACTCAGCC
 GTCCTCTGTTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
 CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACAGCT
 CCAAAGTTGCTGATCTATCGCGACGACAAAAGACCTCAGGGGTCCCTGACCATT
 TAGTGGCAGCAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
 AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
 GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
 ATGCCCACCCTGCCAGCACCTGAAGCCGAGGGGACCCTCAGTCTTCCTCTTCC
 CCCCCAAACCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTG
 GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
 CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
 ACCGGGTGGTCAAGCTCCTCACCGTCTGACACAGGACTGGCTGAATGGCAAGGAG
 TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
 CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
 ACGAGCTGACCAAGAACCAGGTGAGCTGACCTGCCTGGTCAAAGGCTTCTATCCC
 AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCGAGAACAACTACAAGAC
 CACCCCTCCCGTGTGAGTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
 TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
 GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG

(配列番号82)シグナル配列(1-57)、NYA-2060(61-798)、linker(799-
 813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
 1584)、CH2(1585-1914)、CH3(1915-2235)

[図84]

NYF-0061-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGTGAGGTACAGCTGGTGGAAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
 TCGACTCTCTTTCGCGCCGATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCCGACAAGCCCCCTGGCAAAGGTCTTGAATGGGTGGCCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTACAATTTACAGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCTTTGATATATGGGG
 CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCTCTGGCACC
 CCGGGCCAACGGGTACAAATATCATGTTCTGGCTCTTCAAGCAACATCGGAACTG
 GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
 ACAACAACAAACGGCCCCAGTGGAGTTCCTGACAGATTTCAGTGGGTCTAAAAGTGGT
 ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
 TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTACTA
 AGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGAGTGCAGCTGGTGGAAATCCGGGGGG
 GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
 ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
 GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
 GGCAGGTTCAAAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
 TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
 GGTGGGTGCGCTATTGGGGGCGAGGAACCTGGTGGAGTCAAGTCAAGTCAAGTCAAGT
 GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
 GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
 CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
 CCAAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
 TAGTGGCAGCAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
 AAGATGAGGCAGACTACTATTGCCAGTCAATTTCCAGCGGCTTCATCTTCGGAGGC
 GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAATCTTCTGACAAAACCTCACAC
 ATGCCCACCCTGCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
 CCCCCAAAACCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTG
 GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
 CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
 ACCGGGTGGTCAAGCTCCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
 TACAAGTGCAAGGTCTCAAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
 CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
 ACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
 AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
 CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCCTCGTGAGCAAGCTACCG
 TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
 GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
 (配列番号83)シグナル配列(1-57)、NYA-2061(61-798)、linker(799-
 813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-
 1584)、CH2(1585-1914)、CH3(1915-2235)

[図85]

HC1

MKHLWFFLLLVAAPRWVLSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVSVDHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVLPFSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYLTWPPVLDSDGSFFLYSKLTVDKSRWQQGNVFS

SVMHEALHNHYTQKSLSLSPGK
(配列番号84) シグナル配列 (1-19)、Hinge (20-29)、CH2 (30-139)、CH3 (140-246)

[図86]

NYF-0016-HC

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMYVYLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQGTMTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAPGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKGSTATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGGGLVQPGGSLRLSCAASGVTFTNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVKGRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVAYWGQGTITVTVSSGGGGSGGGGGSGGGGSNFMLTQPSVSGVPGQRTVISTGNTGNIGSNYVNWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFAEDEADYYCQSYSSGFIFGGTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVSVDHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFS

SVMHEALHNHYTQKSLSLSPGK
(配列番号85) シグナル配列 (1-19)、NYA-1143 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図87]

NYF-0019-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWVRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMYVYLQMSGLRVEDTAVYHCARGSSGHYEAFDIWGQGTMTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAPGQKVTISCSGSSSNIGNWYVSWYQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKGSTATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGGGLVQPGGSLRLSCAASGVTFTNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVKGRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVAYWGQGTITVTVSSGGGGSGGGGGSGGGGSNFMLTQPSVSGVPGQRTVISTGNTGNIGSNYVNWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFAEDEADYYCQSYSSGFIFGGTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVSVDHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFS

SVMHEALHNHYTQKSLSLSPGK
(配列番号86) シグナル配列 (1-19)、NYA-2143 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図88]

NYF-0022-HC2

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSVDIHW
 VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDVSK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVAYWGQGLTVTVSSGGG
 GSGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPPVLDSDGSFALVSKLTVDKSRWQQGNVFSQVMHE
 ALHNHYTQKSLSLSPGK

(配列番号87) シグナル配列 (1-19)、NYA-1163 (21-266)、linker (267-
 271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、
 CH2 (529-638)、CH3 (639-745)

[図89]

NYF-0023-HC2

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSVDIHW
 VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDVSK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVAYWGQGLTVTVSSGGG
 GSGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPPVLDSDGSFALVSKLTVDKSRWQQGNVFSQVMHE
 ALHNHYTQKSLSLSPGK

(配列番号88) シグナル配列 (1-19)、NYA-2023 (21-266)、linker (267-
 271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、
 CH2 (529-638)、CH3 (639-745)

[図90]

NYF-0027-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGGSGGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGSWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIIYYPDSVK
 GRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTLLTVTVSSGGG
 GSGGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFCSSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号89) シグナル配列 (1-19)、NYA-2027 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図91]

NYF-0035-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
 VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGGSGGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWKVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIIYYPDSVK
 GRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTLLTVTVSSGGG
 GSGGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFCSSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号90) シグナル配列 (1-19)、NYA-2035 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図92]

NYF-0044-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRLAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTTLVTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTTLVTVSSGGG
 GSGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPVLDSDGSFALVSKLTVDKSRWQQGNVFCFSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号91) シグナル配列(1-19)、NYA-2044(21-266)、linker(267-271)、C3E-7085(272-511)、linker(512-513)、Hinge(514-528)、CH2(529-638)、CH3(639-745)

[図93]

NYF-0045-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRLAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTTLVTVSSGGGGSGGGSGGGGSQSVLTQPPSASGT
 PGQRTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
 TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTTLVTVSSGGG
 GSGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPVLDSDGSFALVSKLTVDKSRWQQGNVFCFSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号92) シグナル配列(1-19)、NYA-2045(21-266)、linker(267-271)、C3E-7085(272-511)、linker(512-513)、Hinge(514-528)、CH2(529-638)、CH3(639-745)

[図94]

NYF-0047-HC2

MKHLWFFLLLVAAAPRWVLSGQVQLVESGGGVVQPGRSRLRLSCAASGFSIRSMDHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDNKNTLYLQMSSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGLTVTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGLTVTVSSGGG
 GSGGGSGGGGSNFMLTQPSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVVFSCSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号93) シグナル配列(1-19)、NYA-2047(21-266)、linker(267-271)、C3E-7085(272-511)、linker(512-513)、Hinge(514-528)、CH2(529-638)、CH3(639-745)

[図95]

NYF-0048-HC2

MKHLWFFLLLVAAAPRWVLSGQVQLVESGGGVVQPGRSRLRLSCAASGFSIRSMDHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDNKNTLYLQMSSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGLTVTVSSGGGGSGGGSGGGGSQSVLTQPPSASGT
 PGQRTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
 TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGLTVTVSSGGG
 GSGGGSGGGGSNFMLTQPSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVVFSCSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号94) シグナル配列(1-19)、NYA-2048(21-266)、linker(267-271)、C3E-7085(272-511)、linker(512-513)、Hinge(514-528)、CH2(529-638)、CH3(639-745)

[図96]

NYF-0060-HC2

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTLLTVTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTLLTVTVSSGGG
 GSGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFSQVMHE
 ALHNHYTQKSLSLSPGK

(配列番号95) シグナル配列(1-19)、NYA-2060(21-266)、linker(267-
 271)、C3E-7085(272-511)、linker(512-513)、Hinge(514-528)、
 CH2(529-638)、CH3(639-745)

[図97]

NYF-0061-HC2

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTLLTVTVSSGGGGSGGGSGGGGSQSVLTQPPSASGT
 PGQRTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
 TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTLLTVTVSSGGG
 GSGGGSGGGGSNFMLTQPSSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFSQVMHE
 ALHNHYTQKSLSLSPGK

(配列番号96) シグナル配列(1-19)、NYA-2061(21-266)、linker(267-
 271)、C3E-7085(272-511)、linker(512-513)、Hinge(514-528)、
 CH2(529-638)、CH3(639-745)

[図98]

NYA-0001-Fab-HC1-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGA
CACCTCCTGTTACGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGGGTC
CGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGGAAG
TCAGAACTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACGAAT
CGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCTGTT
TATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGGCCA
AGGGACAATGGTCAACGTCTCTTCAGCCTCCACCAAGGGCCCAAGCGTCTTCCCC
TGGCACCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTC
AAGGACTACTTCCCCGAACCCGTGACCGTGAGCTGGAACCTCAGGCGCCCTGACCAG
CGGCGTGCACACCTTCCCCGCTGTCTGCAGTCCTCAGGACTCTACTCCCTCAGCA
GCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTG
AATCACAAGCCCAGCAACACCAAGGTGGACAAGAGAGTTGAGCCCAAATCTTGTGA
CAAACTCACACATGCCACCCCTGCCCAGCACCTGAAGCCGCAGGGGGACCCCTCAG
TCTTCTCTTCCCCCAAAACCAAGGACACCCCTCATGATCTCCCGGACCCCTGAG
GTCACATGCGTGGTGGTGTGAGTGAGCCACGAAGACCCCTGAGGTCAAGTTCAACTG
GTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGT
ACAACAGCACGTACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTG
AATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCATCGA
GAAAACCATCTCCAAGCCAAAGGCCAGCCCCGGGAACCAAGGTGTACGTGCTGC
CCCCATCCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGCTGTGCCTGGTCAAA
GGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCCGAGAA
CAACTACCTGACCTGGCCTCCCGTGCTGGACTCCGACGGCTCCTTCTTCTCTACA
GCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCC
GTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCC
CGGC

(配列番号97) シグナル配列 (1-57)、NYA-0001_VH (58-417)、CH1 (418-711)、Hinge (712-756)、CH2 (757-1086)、CH3 (1087-1404)

[図99]

NYA-0001-LC

ATGGTGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCGTA
CGGCCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAAGG
TCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGG
TACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATGACAATAATAAGCG
ACCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGCACGTGAGCCACCC
TGGGCATCACCGGACTCCAGACTGGGGACGAGGCGGATTATTACTGCGGAACATGG
GATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCAAGGTACCGTCTT
AGGCCAGCCTAAGGCTGCCCCCTAGCGTGACCCTGTTCCCTCCTTCCAGCGAGGAGC
TTCAAGCTAACAAGGCCACCCCTGGTGTGTCTTATCTCTGACTTCTACCCTGGCGCT
GTGACCGTGGCCTGGAAGGCTGACAGCTCCCTGTGAAGGCCGGAGTGGAGACCAC
CACACCTAGCAAGCAGTCTAACAACAAGTACGCTGCCAGCTCCTACCTGAGCCTTA
CCCCTGAGCAGTGGAAGTCTCACAGAAGCTACTCCTGTCAAGTGACCCACGAGGGC
AGCACCGTGGAGAAGACCGTGGCTCCTACCGAGTGTTCC

(配列番号98) シグナル配列 (1-60)、NYA-0001_VL (61-393)、CL (394-711)

[図100]

NYA-0001-Fab-HCl-k delete

MKHLWFFLLLVAAPRWVLSEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWV
RQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTAV
YHCARGSSGHYEAFDIWGQGTMTVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTISWNSGALTSGVHTFPAVLQSSGLYSLSSVTVPSSSLGTQTYICNV
NHHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPE
VTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWL
NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVLPISRDELTKNQVSLTCLVK
GFYPSDIAVEWESNGQPENNYLTWPPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
CSVMHEALHNHYTQKSLSLSPG

(配列番号99)シグナル配列(1-19)、NYA-0001_VH(20-139)、CH1(140-237)、Hinge(238-252)、CH2(253-362)、CH3(363-468)

[図101]

NYA-0001-LC

MVLQTQVFISLLWISGAYGQSVLTQPPSVSAAPGQKVTISCSGSSSNIGNNYVSW
YQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGTW
DSSLSAPWVFGGGTKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGA
VTVAWKADSSPVKAGVETTTTPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEG
STVEKTVAPTECS

(配列番号100)シグナル配列(1-20)、NYA-0001_VL(21-131)、CL(132-237)

[図102]

NYA-1143-Fab-HC1-k delete

ATGAAACACCTGTGGTTCCTTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCCTGA
CACCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGGGTC
CGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGGAAG
TCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACGAAT
CGGAGAACATGGTGTATCTGCAAATGAGCGGCCCTGAGAGTTGAGGACACGGCTGTT
TATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGGCCA
AGGGACAATGGTCAACGTCCTTCAGCCTCCACCAAGGGCCCCAAGCGTCTTCCCCC
TGGCACCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTC
AAGGACTACTTCCCCGAACCCGTGACCGTGAGCTGGAACCTCAGGCGCCCTGACCAG
CGGCGTGCACACCTTCCCCGCTGTCTGTCAGTCTCAGGACTCTACTCCCTCAGCA
GCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTG
AATCACAAAGCCCAGCAACACCAAGGTGGACAAGAGAGTTGAGCCCAAATCTTGTGA
CAAACTCACACATGCCCACCTGCCCAGCACCTGAAGCCGCAGGGGGACCCCTCAG
TCTTCCTCTTCCCCCAAAACCAAGGACACCCCTCATGATCTCCCGGACCCCTGAG
GTCACATGCGTGGTGGTGTCTAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTG
GTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGT
ACAACAGCACGTACCGGGTGGTCAGCGTCCTCACCGTCCTGCACCAGGACTGGCTG
AATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCATCGA
GAAAACCATCTCCAAGCCAAAGGCCAGCCCCGGGAACCAAGGTGTACGTGCTGC
CCCCATCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGCTGTGCCTGGTCAAA
GGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCCGAGAA
CAACTACCTGACCTGGCCTCCCGTGTCTGGACTCCGACGGCTCCTTCTTCTCTACA
GCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCC
GTGATGCATGAGGCTCTGCACAACCACTACACCAGAAGAGCCTCTCCCTGTCTCC
CGGC

(配列番号101) シグナル配列 (1-57)、NYA-1143_VH (58-417)、CH1 (418-711)、Hinge (712-756)、CH2 (757-1086)、CH3 (1087-1404)

[図103]

NYA-1143-LC

ATGGTGTCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCGTA
CGGCCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGG
TCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTGGTATGTATCCTGG
TACCAGCAGCTCCCAGGAACAGCCCCAAACTCCTCATTTATGACAATAATAAGCG
ACCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTGAGCCACCC
TGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTACTGCGGAACATGG
GATAGCAGCCTGAGTGCCCCCTGGGTGTTCTGGCGGAGGGACCAAGGTACCGTCCT
AGGCCAGCCTAAGGCTGCCCCCTAGCGTGACCCCTGTTCCCTCCTTCCAGCGAGGAGC
TTCAAGCTAACAAGGCCACCCTGGTGTGTCTTATCTCTGACTTCTACCCTGGCGCT
GTGACCGTGGCCTGGAAGGCTGACAGCTCCCCTGTGAAGGCCGGAGTGGAGACCAC
CACACCTAGCAAGCAGTCTAACAACAAGTACGCTGCCAGCTCCTACCTGAGCCTTA
CCCCTGAGCAGTGGAAGTCTCACAGAAGCTACTCCTGTCAAGTGACCCACGAGGGC
AGCACCGTGGAGAAGACCGTGGCTCCTACCGAGTGTTCC

(配列番号102) シグナル配列 (1-60)、NYA-1143_VL (61-393)、CL (394-711)

[図104]

C3E-7085-HC2-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGAGAAAGTGCAGCTGGTGGAAATCCGGGGGGGGCCCTGGTGCAGCCTGGGGGGAGCC
 TGAGACTGAGTTGTGCCGCTCTGGGGTGACATTTAACTACTATGGCATGTCTTGG
 ATCCGCCAGGCACCTGGAAAGGGCCTGGAGTGGGTGGCCAGCATCACTAGGTCCGG
 CGGGCGAATCTACTATCCCAGACAGCGTCAAGGGCAGGTTACAATTTCCCGCGAGA
 ACACACAGAAAACCTCTGTACCTGCAGATGAATAGCCTGAGAGCCGAAGATACAGCT
 GTGTACTATTGCACTCTGGACGGCAGGGATGGGTGGGTGCGCTATTGGGGGCAGGG
 AACCTGGTGACAGTCAGCTCCGGAGGAGGAGGATCTGGCGGAGGAGGCAGTGGGG
 GAGGCGGGTCAAACCTTTATGCTCACTCAGCCGTCTCTGTTTCTGGCGTACCTGGC
 CAACGGGTGACCATTAGCTGTACGGGTAATACCGGGAATATCGGGTCTAACTACGT
 GAACTGGTATCAGCAGCTTCCAGGGACAGCTCCCAAGTTGCTGATCTATCGCGACG
 ACAAAGACCCCTCAGGGGTCCCTGACCGATTAGTGGCAGCAAAGCGGTACTTCC
 GCTTCCCTGGCGATAACCGGCTTTTCAGGCCGAAGATGAGGCAGACTACTATTGCCA
 GTCATATTCCAGCGGCTTCATCTTCGGAGGCGGAACCTAAGCTGACAGTGTGGCAG
 CCGAGCCCAAATCTTCTGACAAAACCTCACACATGCCACCCCTGCCCAGCACCTGAA
 GCCGAGGGGGACCCCTCAGTCTTCTCTTCCCCCAAACCCAAGGACACCCCTCAT
 GATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTGTGAGTGAGCCACGAAGACC
 CTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACA
 AAGCCCCGGGAGGAGCAGTACAACAGCACGTACCGGGTGGTCAGCGTCTCACCGT
 CCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAG
 CCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAA
 CCACAGGTGTACGTGTACCCCCCATCCCGGACGAGCTGACCAAGAACCAGGTCAG
 CCTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGA
 GCAATGGCCAGCCCGAGAACAACCTACAAGACCACCCCTCCCGTGTGACTCCGAC
 GGCTCCTTCGCCCTCGTGAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGG
 CAACGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGA
 AGAGCCTCTCCCTGTCTCCC

(配列番号103) シグナル配列 (1-57)、C3E-7085 (61-780)、linker (781-786)、Hinge (787-831)、CH2 (832-1161)、CH3 (1162-1479)

[図105]

NYA-1143-Fab-HC1-k delete

MKHLWFFLLLVAAPRWLSEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHWV
 RLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTAV
 YHCARGSSGHYEAFDIWGQGTMTVTSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
 KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNV
 NHKPSNTKVDKRVEPKSCDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPE
 VTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWL
 NGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVLPSPSRDELTKNQVSLCLVK
 GFYPSDIAVEWESNGQPENNYLTWPPVLDSDGSFFLYSKLTVDKSRWQQGNVFS
 CS VMHEALHNHYTQKSLSLSPG

(配列番号104) シグナル配列 (1-19)、NYA-1143_VH (20-139)、CH1 (140-237)、Hinge (238-252)、CH2 (253-362)、CH3 (363-468)

[図106]

NYA-1143-LC

MVLQTQVFISLLWISGAYGQSVLTQPPSVSAAPGQKVTISCSGSSSNIGNWYVSW
YQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGTW
DSSLAPWVFGGGTKVTVLQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGA
VTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEG
STVEKTVAPTECS

(配列番号105) シグナル配列 (1-20)、NYA-1143_VL (21-131)、CL (132-237)

[図107]

C3E-7085-HC2-k delete

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSW
IRQAPGKGLEWVASITRSGGRIYYPD SVKGRFTISRENTQKTLYLQMNSLRAEDTA
VYYCTLDGRDGWVAYWGQGT LVT VSSGGGGSGGGGSGGGGSNFMLTQPSSVSGVPG
QRVTISCTGNTGNIGSNYVNWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTS
ASLAITGFQAEDEADYYCQSYSSGFIFGGGTKLTVLAAEPKSSDKTHTCPPCPAPE
AAGGPSVFLFPPKPKDTLMISRTPEVTCVVS VSHEDPEVKFNWYVDGVEVHNAKT
KPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI SKAKGQPRE
PQVYVYPISRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSD
GSFALVSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKSLSLSPG

(配列番号106) シグナル配列 (1-19)、C3E-7085 (21-260)、linker (261-262)、Hinge (263-277)、CH2 (278-387)、CH3 (388-493)

[図108]

NYA-1143-HC1-k delete

ATGAAACACCTGTGGTTCCTTCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGACAGCTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCTCATTTATG
ACAATAATAAGCGACCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCTTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCTTGGGTGTTGCGCGGAGGGACCA
AGGTCACCGTCTTAGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACACATGCCCA
CCCTGCCCAGCACCTGAAGCCGAGGGGGACCTCAGTCTTCTCTTCCCCCAA
ACCCAAGGACACCTCATGATCTCCCGGACCCCTGAGGTACATGCGTGGTGGTGT
CAGTGAGCCACGAAGACCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAG
GTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGTACCGGGT
GGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGT
GCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCC
AAAGGCCAGCCCCGGGAACACAGGTGTACGTGCTGCCCCCATCCCGGGACGAGCT
GACCAAGAACCAGGTGAGCCTGCTGTGCCTGGTCAAAGGCTTCTATCCCAGCGACA
TCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACCTACCTGACCTGGCCT
CCCGTGCTGGACTCCGACGGCTCCTTCTTCTCTACAGCAAGCTCACCGTGGACAA
GAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGC
ACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGC

(配列番号107) シグナル配列 (1-57)、NYA-1143 (61-798)、linker799-800)、Hinge (801-849)、CH2 (850-1179)、CH3 (1180-1497)

[図109]

NYA-1143-HC1-k delete

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSIDIHW
VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
VYHCARGSSGHYEAFDIWGQGTMTVTVSSGGGGSGGGSGGGGSQSVLTQPPSVSAA
PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLAAEPKSSDKTHTCP
PCPAPEAAGGPSVFLFPPKPKDTLMI SRTPEVTCVVSVSHEDPEVKFNWYVDGVE
VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
KGQPREPQVYVLPSPRDELTKNQVSLVCLVKGFYPSDIAVEWESNGQPENNYLTWP
PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQVMHEALHNHYTQKSLSLSPG

(配列番号108) シグナル配列 (1-19)、NYA-1143 (21-266)、linker (267-268)、Hinge (269-283)、CH2 (284-393)、CH3 (394-499)

[図110]

C3E-7085-NYA-1154-Fab-HC2-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAAGTGCAGCTGGTGGGAATCCGGGGGGGGCCTGGTGCAGCCTGGGGGGAGCC
TGAGACTGAGTTGTGCCGCCTCTGGGGTGACATTTAACTACTATGGCATGTCTTGG
ATCCGCCAGGCACCTGAAAAGGGCCTGGAGTGGGTGGCCAGCATCACTAGGTCCGG
CGGGCGAATCTACTATCCCAGACAGCGTCAAGGGCAGGTTACAAATTTCCCGCGAGA
ACACACAGAAAACCTCTGTACCTGCAGATGAATAGCCTGAGAGCCGAAGATACAGCT
GTGTACTATTGCACTCTGGACGGCAGGGATGGGTGGGTGCGCTATTGGGGGCAGGG
AACCCTGGTGACAGTCAGCTCCGGAGGAGGAGGATCTGGCGGAGGAGGCAGTGGGG
GAGGCGGGTCAAACCTTATGCTCACTCAGCCGTCCTCTGTTTCTGGCGTACCTGGC
CAACGGGTGACCATTAGCTGTACGGGTAATACCGGGAATATCGGGTCTAACTACGT
GAACTGGTATCAGCAGCTTCCAGGGACAGCTCCCAAGTTGCTGATCTATCGCGACG
ACAAAAGACCCTCAGGGGTCCCTGACCGATTTAGTGGCAGCAAAAGCGGTACTTCC
GCTTCCCTGGCGATAACCGGCTTTCAGGCCGAAGATGAGGCAGACTACTATTGCCA
GTCATATTCCAGCGGCTTCATCTTCGGAGGCGGAACCTAAGCTGACAGTGTTGGGGG
GAGGCGGTTTCAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGG
AGGTCCCTGACACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATAT
GCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCAT
ATGATGGAAGTCAGAACTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTC
AGAGACGAATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGA
CACGGCCGTTTATCACTGTGCGAGAGGGAGTAGTAATCATTATGAGGCTTTTGATA
TCTGGGGCCAAAGGGACAATGGTCACCGTCTCTTCAGCCTCCACCAAGGGCCCAAGC
GTCTTCCCCCTGGCACCCCTCCTCCAAGAGCACCTCTGGCGGCACAGCCGCCCTGGG
CTGCCCTGGTCAAGGACTACTTCCCCGAACCCGTGACCGTGAGCTGGAACCTCAGGCG
CCCTGACCAGCGGCGTGACACCTTCCCCGCTGTCCTGCAGTCCTCAGGACTCTAC
TCCCTCAGCAGCGTGGTGACCGTGCCCTCCAGCAGCTTGGGCACCCAGACCTACAT
CTGCAACGTGAATCACAAGCCCAGCAACACCAAGGTGGACAAGAGAGTTGAGCCCCA
AATCTTGTGACAAAACCTCACACATGCCCACCCTGCCAGCACCTGAAGCCGCAGGG
GGACCCCTCAGTCTTCTCTTCCCCCAAAACCCAAGGACACCCTCATGATCTCCCG
GACCCCTGAGGTACATGCGTGGTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCA
AGTTCAACTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGG
GAGGAGCAGTACAACAGCACGTACCGGGTGGTCAGCGTCCTCACCGTCCTGCACCA
GGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCAG
CCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAACCACAGGTG
TACGTGTACCCCCCATCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGACCTG
CCTGGTCAAAGGCTTCTATCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCC
AGCCCGAGAACAACTACAAGACCACCCCTCCCGTGCTGGACTCCGACGGCTCCTTC
GCCCTCGTGAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTT
CTCATGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACCAGAAGAGCCTCT
CCCTGTCTCCCGGC

(配列番号109)シグナル配列(1-57) C3E-7085 (61-780)、linker(781-795)、NYA-1154-VH(796-1155)、CH1(1156-1470)、Hinge(1471-1500)、CH2(1501-1830)、CH3(1831-2142)

[図111]

NYA-1154-LC

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCGTA
CGGCCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCCCCAGGACAGAAGG
TCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAATTATGTATCCTGG
TACCAGCGGCTCCAGGAACAGCCCCAAACTCCTCATTTATGACAATAATAAGCG
ACCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGCACGTGAGCCACCC
TGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTACTACTGCGGAGCATGG
GATAGCAGCCTGAGTGCCCCCTTGGGTGTTTCGGCGGAGGGACCAAGGTCAACGTCCT
AGGCCAGCCTAAGGCTGCCCCTAGCGTGACCTGTTCCCTCCTTCCAGCGAGGAGC
TTCAAGCTAACAAGGCCACCCCTGGTGTGTCTTATCTCTGACTTCTACCCCTGGCGCT
GTGACCGTGCCCTGGAAGGCTGACAGCTCCCTGTGAAGGCCGAGTGGAGACCAC
CACACCTAGCAAGCAGTCTAACAACAAGTACGCTGCCAGCTCCTACCTGAGCCTTA
CCCCTGAGCAGTGGGAAGTCTCACAGAAGCTACTCCTGTCAAGTGACCCACGAGGGC
AGCACCGTGGAGAAGACCGTGGCTCCTACCGAGTGTTCC

(配列番号110) シグナル配列 (1-60)、NYA-1154_VL (61-393)、CL (394-711)

[図112]

OAA-HC1-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGACAAAACCTCACACATGCCACCCTGCCAGCACCTGAAGCCGCAGGGGGACCCT
CAGTCTTCCTCTTCCCCCAAACCCAAGGACACCCTCATGATCTCCCGGACCCCT
GAGGTCACATGCGTGGTGGTGTGTCAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGC
AGTACAACAGCACGTACCGGTGGTCAGCGTCCTCACCGTCCTGCACCAGGACTGG
CTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCAT
CGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAACCAAGGTGTACGTGC
TGCCCCCATCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGCTGTGCCTGGTC
AAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCGA
GAACAACCTACCTGACCTGGCCTCCCGTGTGACTCCGACGGCTCCTTCTTCCTCT
ACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTC
TCCCCGC

(配列番号111) シグナル配列 (1-57)、Hinge (58-87)、CH2 (88-417)、CH3 (418-735)

[図113]

C3E-7085-NYA-1154-Fab-HC2-k delete
 MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSW
 IRQAPGKGLEWVASITRSGGRIYYPD SVKGRFTISRENTQKTLYLQMNSLRAEDTA
 VYYCTLDGRDGWVAYWGQTLTVTVSSGGGGSGGGSGGGGSNFMLTQPSSVSGVPG
 QRVTISCTGNTGNIGSNYVNWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTS
 ASLAITGFQAEDEADYYCQSYSSGFIFGGGTKLTVLGGGGSEVQLVESGGGVVQPG
 RSLTPSCSASGFSIRS YDMHWVRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIF
 RDESENMYVLQMSGLRVEDTAVYHCARGSSNHYEAFDIWGQGTMTVTVSSASTKGPS
 VFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLY
 SLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVPEPKSCDKTHTCPPCPAPEAAG
 GPSVFLFPPKPKDTLMISRTPEVTCVTVSVSHEDPEVKFNWYVDGVEVHNAKTKPR
 EEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQV
 YVYPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSF
 ALVSKLTVDKSRWQQGNVFC SVMHEALHNHYTQKSLSLSPG
 (配列番号112) シグナル配列(1-19)、C3E-7085 (21-260)、
 linker(261-265)、NYA-1154-VH(266-385)、CH1(386-490)、
 Hinge(491-500)、CH2(501-610)、CH3(611-714)

[図114]

NYA-1154-LC
 MVLQTQVFISLLWISGAYQSVLTQPPSVSAAPGQKVTISCSGSSSNIGNNYVSW
 YQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGAW
 DSSLSAPWVFGGGTKVTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGA
 VTVAWKADSSPVKAGVETTTTPSKQSNKYAASSYLSLTPEQWKSHRSYSCQVTHEG
 STVEKTVAPTECS
 (配列番号113) シグナル配列(1-20)、NYA-1154_VL(21-131)、CL(132-
 237)

[図115]

OAA-HC1-k delete
 MKHLWFFLLLVAAPRWVLSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPE
 VTCVTVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDW
 LNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVLPSPSRDELTKNQVSLTCLV
 KGFYPSDIAVEWESNGQPENNYLTWPPVLDSDGSFFLYSKLTVDKSRWQQGNVFC
 SVMHEALHNHYTQKSLSLSPG
 (配列番号114) シグナル配列(1-19)、Hinge(20-29)、CH2(30-139)、
 CH3(140-245)

[図116]

NYF-0010-HC2-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCTCCTGTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATGCACTGG
GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCC
GTTTATCACTGTGCGAGAGGGAGTAGTAATCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
TTATGTATCCTGGTACCAGCGGCTCCAGGAACAGCCCCAACTCCTCATTATATG
ACAATAATAAGCGACCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTGAGCCACCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTACTA
CTGCGGAGCATGGGATAGCAGCCTGAGTGCCCCCTGGGTGTTTCGGCGGAGGGACCA
AGGTCAACGTCCTAGGGGGAGGCGGTTCAGAAAGTGCAGCTGGTGGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTACAAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGCAGGGAACCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCCCACCTGCCAGCACCTGAAGCCGAGGGGGACCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTCAGTGAGCCACGAAGACCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCGTCTGCACCAAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACCTACAAGAC
CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGC

(配列番号115) シグナル配列(1-57)、NYA-1154(61-798)、linker(799-813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2232)

[図117]

NYF-0004-HC2-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAAGTGCAGCTGGTGGGAATCCGGGGGGGGCCTGGTGCAGCCTGGGGGGAGCC
TGAGACTGAGTTGTGCCGCCTCTGGGGTGACATTTAACTACTATGGCATGTCTTGG
ATCCGCCAGGCACCTGGAAAGGGCCTGGAGTGGGTGGCCAGCATCACTAGGTCCGG
CGGGCGAATCTACTATCCCGACAGCGTCAAGGGCAGGTTACAATTTCCCGCGAGA
ACACACAGAAAACTCTGTACCTGCAGATGAATAGCCTGAGAGCCGAAGATACAGCT
GTGTACTATTGCACTCTGGACGGCAGGGATGGGTGGGTGCGCTATTGGGGGCAGGG
AACCCTGGTGACAGTCAGCTCCGGAGGAGGAGGATCTGGCGGAGGAGGCAGTGGGG
GAGGCGGGTCAAACTTTATGCTCACTCAGCCGTCCTCTGTTTCTGGCGTACCTGGC
CAACGGGTGACCATTAGCTGTACGGGTAATACCGGGAATATCGGGTCTAACTACGT
GAACTGGTATCAGCAGCTTCCAGGGACAGCTCCCAAGTTGCTGATCTATCGCGACG
ACAAAAGACCCTCAGGGGTCCCTGACCGATTAGTGGCAGCAAAAGCGGTACTTCC
GCTTCCCTGGCGATAACCGGCTTTCAGGCCGAAGATGAGGCAGACTACTATTGCCA
GTCATATTCCAGCGGCTTCATCTTCGGAGGCGGAATAAGCTGACAGTGTTGGGGG
GAGGCGGTTTCAAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGG
AGGTCCCTGACACCCTCCTGTTTACGCGTCTGGATTCTCCATCCGTAGTTATGATAT
GCACTGGGTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCAT
ATGATGGAAGTCAGAACTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTC
AGAGACGAATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGA
CACGGCCGTTTATCACTGTGCGAGAGGGAGTAGTAATCATTATGAGGCCTTTTGATA
TCTGGGGCCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTACGGCGGA
GGTGGCAGCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTC
TGCGGCCCCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTG
GGAATAATTATGTATCCTGGTACCAGCGGCTCCAGGAACAGCCCCCAAACCTCCTC
ATTTATGACAATAATAAGCGACCCTCAGGGATTCTGACCGATTCTCTGGCTCCAA
GTCTGGCACGTACGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCG
ATTACTACTGCGGAGCATGGGATAGCAGCCTGAGTGCCCTTGGGTGTTGCGCGGA
GGGACCAAGGTACCGTCTTAGCAGCCGAGCCCAAATCTTCTGACAAAACTCACAC
ATGCCACCCTGCCAGCACCTGAAGCCGCAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTTACCGTCTGACCCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACCAGGTACGCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
CACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGC

(配列番号116) シグナル配列(1-57)、C3E-7085(61-780)、linker(781-795)、NYA-1154(796-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2232)

[図118]

NYF-0011-HC2-k delete

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
TGACACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGCTATGATATACACTGG
GTCCGCCTGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
CCAGGACAGAAGGTCACCATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATTG
GTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCAACTCCTCATTATG
ACAATAATAAGCGACCCCTCAGGGATTCTTGACCGATTCTCTGGCTCCAAGTCTGGC
ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCCGATTATTA
CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTGGGTGTTGCGCGGAGGGACCA
AGGTCACCGTCTTAGGGGGAGGCGGTTCAAGAAGTGCAGCTGGTGGAAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAACTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGCAGGGAACCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAACCTGGTATCAGCAGCTTCCAGGGACAGCT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACATAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCTGCCAGCACCTGAAGCCGCAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTGCTGACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACCACAGGTGTACGTGTACCCCCCATCCCCGG
ACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCGAGAACAACTACAAGAC
CACCCCTCCCGTGTGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGC

(配列番号117) シグナル配列(1-57)、NYA-1143(61-798)、linker(799-813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2232)

[図119]

NYF-0010-HC2-k delete

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDMHW
 VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
 VYHCARGSSNHYEAFDIWGQGTMTVTVSSGGGGSGGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNNYVSWYQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGAWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIIYYPDSVK
 GRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVAYWGQGTTLTVTVSSGGG
 GSGGGSGGGGSGNFMLTQPSVSGVPGQRTVISTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPPVLDSDGSFALVSKLTVDKSRWQQGNVVFSCSVMHE
 ALHNHYTQKSLSLSPG

(配列番号118) シグナル配列 (1-19)、NYA-1154 (21-266)、linker (267-
 271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、
 CH2 (529-638)、CH3 (639-744)

[図120]

NYF-0004-HC2-k delete

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSW
 IRQAPGKGLEWVASITRSGGRIIYYPDSVKGRFTISRENTQKTLYLQMNSLRAEDTA
 VYYCTLDGRDGVAYWGQGTTLTVTVSSGGGGSGGGGSGGGGSGNFMLTQPSVSGVPG
 QRTVISTGNTGNIGSNYVNWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTS
 ASLAITGFQAEDEADYYCQSYSSGFIFGGGTKLTVLGGGGSEVQLVESGGGVVQPG
 RSLTPSCSASGFSIRSYDMHWVRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIF
 RDESENMVYLQMSGLRVEDTAVYHCARGSSNHYEAFDIWGQGTMTVTVSSGGGGSGG
 GGSGGGGSQSVLTQPPSVSAAAPGQKVTISCSGSSSNIGNNYVSWYQRLPGTAPKLL
 IYDNNKRPSGIPDRFSGSKSGTSATLGITGLQTGDEADYYCGAWDSSLSAPWVFGG
 GTKVTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPPVLDSDGSFALVSKLTVDKSRWQQGNVVFSCSVMHE
 ALHNHYTQKSLSLSPG

(配列番号119) シグナル配列 (1-19)、C3E-7085 (21-260)、linker (261-
 265)、NYA-1154 (272-511)、linker (512-513)、Hinge (514-528)、
 CH2 (529-638)、CH3 (639-744)

[図121]

NYF-0011-HC2-k delete

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
 VRLAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGRLVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVSSGGGGSGGGGGSGGGGSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGLTVTVSSGGG
 GSGGGGSGGGGSNFMILTQPSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDNLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFSCSVMHE
 ALHNHYTQKSLSLSPG

(配列番号120) シグナル配列 (1-19)、NYA-1143 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-744)

[図122]

点変異NY-ESOペプチド1F

FLLMWITQC

(配列番号121)

[図123]

点変異NY-ESOペプチド2M

SMLMWITQC

(配列番号122)

[図124]

点変異NY-ESOペプチド3A

SLAMWITQC

(配列番号123)

[図125]

点変異NY-ESOペプチド4A

SLLAWITQC

(配列番号124)

[図126]

点変異NY-ESOペプチド5A

SLLMAITQC

(配列番号125)

[図127]

点変異NY-ESOペプチド6L

SLLMWLTQC

(配列番号126)

[図128]

点変異NY-ESOペプチド7F
SLLMWIFQC
(配列番号127)

[図129]

点変異NY-ESOペプチド8A
SLLMWITAC
(配列番号128)

[図130]

点変異NY-ESOペプチド9A
SLLMWITQA
(配列番号129)

[図131]

gp100ペプチド
IMDQVPFSV
(配列番号130)

[図132]

相同性ペプチドDOLPP1
SQFMWFFSV
(配列番号131)

[図133]

相同性ペプチドIL20RB
SLFMWFFYA
(配列番号132)

[図134]

相同性ペプチドPRKD2
SLDMWSVGV
(配列番号133)

[図135]

相同性ペプチドCD163
SIPMWVDNV
(配列番号134)

[図136]

相同性ペプチドP2RY8
SVAMWAVFL
(配列番号135)

[図137]

C3E-7034
GEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITNSG
GRIYYPD SVKGRFTISRENTQKTLYLQMNSLR AEDTAVYYCTLDGRD GWVAYWGQG
TLVTVS SGGGSGGGGSGGGGSGGNFMLTQPHSVSESPGKTVTISCKRNTGNIGSNYV
N WYQQHEGSSPTTIIYRDDKRPDGVSDRFSGSIDRSSKASLTISNLKTEDEADYF
CQSYSSGFIFGGGTKLTVLGAAAGAGGDYKDDDDKGAAAH HHHHH
(配列番号136) C3E-7034 (1-269)、C3E-7034scFv (2-243)、FLAG-Hisタ
グ (244-269)

[図138]

C3E-7036

GEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITNSG
 GRIYYPDSVKGRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQG
 TLVTVSSGGGGSGGGGSGGGGSGNFMLTQPSVSGVPGQRTISCTGNTGNIGSNYV
 NWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQ
 SYSSGFIFGGGTKLTVLGAAAGAGGDYKDDDDKGAIAHHHHHH

(配列番号137) C3E-7036 (1-267)、C3E-7036 scFv (2-241)、FLAG-His
 タグ (242-267)

[図139]

C3E-7085

GEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSG
 GRIYYPDSVKGRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQG
 TLVTVSSGGGGSGGGGSGGGGSGNFMLTQPSVSGVPGQRTISCTGNTGNIGSNYV
 NWYQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQ
 SYSSGFIFGGGTKLTVLGAAAGAGGDYKDDDDKGAIAHHHHHH

(配列番号138) C3E-7085 (1-267)、C3E-7085 scFv (2-241)、FLAG-His
 タグ (242-267)

[図140]

C3E-7088

GEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSG
 GRIYYPDSVKGRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQG
 TLVTVSSGGGGSGGGGSGGGGSGNFMLTQPHSVSESPGKTVTISCKRNTGNIGSNYV
 NWYQQHEGSSPTTIIYRNDKRPDGVSDRFSGSIDRSSKSASLTISNLKTEDEADYF
 CQSYSSGFIFGGGTKLTVLGAAAGAGGDYKDDDDKGAIAHHHHHH

(配列番号139) C3E-7088 (1-269)、C3E-7088 scFv (2-243)、FLAG-His
 タグ (244-269)

[図141]

C3E-7093

GEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITSSG
 GRIYYPDSVKGRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQG
 TLVTVSSGGGGSGGGGSGGGGSGNFMLTQPHSVSESPGKTVTISCKRNTGNIGSNYV
 NWYQQHEGSSPTTIIYRNDKRPDGVSDRFSGSIDRSSKSASLTISNLKTEDEADYF
 CQSYSSGFIFGGGTKLTVLGAAAGAGGDYKDDDDKGAIAHHHHHH

(配列番号140) C3E-7093 (1-269)、C3E-7093 scFv (2-243)、FLAG-His
 タグ (244-269)

[図142]

C3E-7085重鎖CDRH1	GVTFNYYG
C3E-7085重鎖CDRH2	ITRSGGRI
C3E-7085重鎖CDRH3	TLDGRDGVVAY
C3E-7085重鎖CDRL1	TGNIGSNY
C3E-7085重鎖CDRL2	RDD
C3E-7085重鎖CDRL3	QSYSSGFI

(配列番号141~146)

[図143]

C3E-7078

GEVQLVESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSG
GRIYYPDSVKGRFTISRENTQKTLYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQG
TLVTVSSGGGGSGGGSGGGGSNFMLTQPHSVSESPGKTVTISCKRNTGNIGSNYV
NWKQQHEGSSPTTIIYRDDKRPDGVSDRFSGSIDRSSKSASLTISNLKTEDEADYF
CQSYSSGFIFGGGTKLTVLGAAAGAGGDYKDDDDKGAHHHHHHH

(配列番号147) C3E-7078 (1-269)、C3E-7078scFv (2-243)、FLAG-His
タグ (244-269)

[図144]

NYF-0014-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGAGAGGTGCAGCTGGTGGAGTCTGGGGGAGGCGTGGTCCAGCCTGGGAGGTCCC
 TGACACCCTCCTGTTTCAGCGTCTGGATTCTCCATCCGTAGTTATGATATACACTGG
 GTCCGCCAGGCTCCAGGCAAGGGGCTAGAGTGGGTGGCCACTATATCATATGATGG
 AAGTCAGAAGTACTTCGCAGACTCCGTGAAGGGCCGATTTACCATCTTCAGAGACG
 AATCGGAGAACATGGTGTATCTGCAAATGAGCGGCCTGAGAGTTGAGGACACGGCT
 GTTTATCACTGTGCGAGAGGGAGTAGTGGTCATTATGAGGCTTTTGATATCTGGGG
 CCAAGGGACAATGGTCACCGTCTCTTCAGGTGGAGGCGGTTTCAGGCGGAGGTGGCA
 GCGGCGGTGGCGGGAGTCAGTCTGTGTTGACGCAGCCGCCCTCAGTGTCTGCGGCC
 CCAGGACAGAAGGTCAACATCTCCTGCTCTGGAAGCAGCTCCAACATTGGGAATAA
 TTATGTATCCTGGTACCAGCAGCTCCCAGGAACAGCCCCCAAACCTCCTCATTTATG
 ACAATAATAAGCGACCCCTCAGGGATTCTGACCGATTCTCTGGCTCCAAGTCTGGC
 ACGTCAGCCACCCTGGGCATCACCGGACTCCAGACTGGGGACGAGGCGGATTATTA
 CTGCGGAACATGGGATAGCAGCCTGAGTGCCCCCTTGGGTGTTGCGCGGAGGGACCA
 AGGTCAACGTCCTAGGGGGAGGCGGTTCAGAAAGTGCAGCTGGTGGAATCCGGGGGG
 GGCTGTGTCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
 ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAAGGGCCTGGAGT
 GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
 GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCTGTACCTGCAGATGAA
 TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
 GGTGGGTGCGCTATTGGGGGGCAGGGAACCCCTGGTGACAGTCAGCTCCGGAGGAGGA
 GGATCTGGCGGAGGAGGAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
 GTCTCTGTCTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
 CCGGGAATATCGGGTCTAACTACGTGAAGTGGTATCAGCAGCTTCCAGGGACAGCT
 CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
 TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTCAGGCCG
 AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
 GGAACATAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
 ATGCCACCCTGCCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCTCTTCC
 CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
 GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
 CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
 ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
 TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
 CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
 ACGAGCTGACCAAGAACCAGGTCAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
 AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACTACAAGAC
 CACCCCTCCCGTGTGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
 TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
 GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG

(配列番号148) シグナル配列(1-57)、NYA-0001(61-798)、linker(799-813)、C3E-7085(814-1533)、linker(1534-1539)、Hinge(1540-1584)、CH2(1585-1914)、CH3(1915-2235)

[図145]

NYF-0014-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNNYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLYLQMNLSRAEDTAVYYCTLDGRDGVAYWGQGTTLTVSSGGG
 GSGGGGSGGGGSGNFMLTQPSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPPVLDSDGSFALVSKLTVDKSRWQQGNVFSQVMHE
 ALHNHYTQKSLSLSPGK

(配列番号149) シグナル配列 (1-19)、NYA-0001 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図146]

NYF-0082-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGRSLTPSCSASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYFADSVKGRFTIFRDESENMVYLQMSGLRVEDTA
 VYHCARGSSGHYEAFDIWGQGTMTVSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNNYVSWYQRLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGSWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLYLQMNLSRAEDTAVYYCTLDGRDGVAYWGQGTTLTVSSGGG
 GSGGGGSGGGGSGNFMLTQPSVSGVPGQRTISCTGNTGNIGSNYVNWYQQLPGTA
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTPPVLDSDGSFALVSKLTVDKSRWQQGNVFSQVMHE
 ALHNHYTQKSLSLSPGK

(配列番号150) シグナル配列 (1-19)、NYA-0082 (21-266)、linker (267-271)、C3E-7085 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図147]

ヒトCD3εのアミノ酸配列

MQSGTHWRVLGLCLLSVGVWGQDGNEMGGITQTPYKVSISGTTVILTCQYPGSE
 ILWQHNDKNIGGDEDDKNIGSDEDHLSLKEFSELEQSGYYVCYPRGSKPEDANFYLL
 YLRARVCENCMEMDVMSVATIVIVDICITGGLLLLVIYWSKNRKAKAKPVTRGAGA
 GGRQRGQNKERPPVPNPDIYEPKRGQRDLVSGLNQRRRI

(配列番号151:NCBI Reference Sequence: NP_000724.1)

[図148]

NYZ-0038-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
GTCCGACAAGCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTACAATTTACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCCCTCAGGCCACTACGAGGCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCTCTGGCACC
CCGGGCCAACGGGTACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAACTG
GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
ACAACAACAAACGGCCAGTGGAGTTCTTGACAGATTTCAGTGGGTCTAAAAGTGGT
ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTTCGGCGGAGGTAATA
AGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGAGTGCAGCTGGTGAATCCGGGGGG
GGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGCCGCTCTGGGGTGAC
ATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTGGAAGGGCCTGGAGT
GGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTATCCCGACAGCGTCAAG
GGCAGGTTCACAATTTCCCGCGAGAACACACAGAAACTCTGTACCTGCAGATGAA
TAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTCTGGACGGCAGGGATG
GGTGGGTGCGCTATTGGGGGTGTGGAACCTGGTGACAGTCAGCTCCGGAGGAGGA
GGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTTTATGCTCACTCAGCC
GTCTCTGTTTTCTGGCGTACCTGGCCAACGGGTGACCATTAGCTGTACGGGTAATA
CCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAGCTTCCAGGGACATGT
CCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGGGGTCCCTGACCGATT
TAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAACCGGCTTTTCAGGCCG
AAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGCTTCATCTTCGGAGGC
GGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTCTGACAAAACCTCACAC
ATGCCACCCTGCCCAGCACCTGAAGCCGAGGGGGACCCTCAGTCTTCCTCTTCC
CCCCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTG
GTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGG
CGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGT
ACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGGCTGAATGGCAAGGAG
TACAAGTGCAAGGTCTCCAACAAAGCCCTCCAGCCCCCATCGAGAAAACCATCTC
CAAAGCCAAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGG
ACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTCAAAGGCTTCTATCCC
AGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCGAGAACAACTACAAGAC
CACCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTCACCG
TGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAG
GCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG
(配列番号152) シグナル配列(1-57)、NYA-2061(61-798)、linker(799-
813)、C3E-7096(814-1533)、linker(1534-1539)、Hinge(1540-
1584)、CH2(1585-1914)、CH3(1915-2235)

[図149]

NYZ-0082-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGTGAGGTACAGCTGGTGGAAATCCGGTGGAGGCCCTTGTCGAACCGGGAGGCTCCC
 TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCCGACAAGCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTCACGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCCCTCAGGCCACTACGAGGCCCTTTGATATATGGGG
 CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTGGAGGAGGTGGATCTCAATCCGTTCTGACTCAGCCACCC
 TCCGCCTCTGGCACCCCGGGCCAACGGGTCACAATATCATGTTCTGGCTCTTCAAG
 CAACATCGGAAACTGGTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCA
 AGCTTCTGATATATGACAACAACAACGGCCAGTGGAGTTCCTGACAGATTTCAGT
 GGGTCTAAAAGTGGTACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGA
 TGAGGCGGACTATTATTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTT
 TCGGCGGAGGTACTAAGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGTGCAGCTG
 GTGGAATCCGGGGGGGGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGC
 CGCCTCTGGGGTGACATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTG
 GAAAGGGCCTGGAGTGGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTAT
 CCCGACAGCGTCAAGGGCAGGTTCAAAATTTCCCGCGAGAACACACAGAAAATCT
 GTACCTGCAGATGAATAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTC
 TGGACGGCAGGGATGGGTGGGTGCCTATTGGGGGTGTGGAACCTGGTGACAGTC
 AGCTCCGGAGGAGGAGGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCT
 TATGCTCACTCAGCCGTCTCTGTTTCTGGCGTACCTGGCCAAACGGGTGACCATTA
 GCTGTACGGGTAATACCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAG
 CTTCCAGGGACATGTCCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGG
 GGTCCCTGACCGATTTAGTGGCAGCAAAAGCGGTACTTCCGCTTCCCTGGCGATAA
 CCGGCTTTTCAGGCCGAAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGC
 TTCATCTTCGGAGGCGGAACCTAAGCTGACAGTGTGGCAGCCGAGCCCAAATCTTC
 TGACAAAACCTCACACATGCCACCCTGCCAGCACCTGAAGCCGAGGGGGACCCT
 CAGTCTTCTCTTCCCCCCTAAACCAAGGACACCCTCATGATCTCCCGGACCCCT
 GAGGTCACATGCGTGGTGGTGTGAGTGGCCACGAAGACCCTGAGGTCAAGTTCAA
 CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGC
 AGTACAACAGCACGTACCGGGTGGTCAGCGTCTCACCCTCCTGCACCAGGACTGG
 CTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCAT
 CGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAACCAAGGTGTACGTGT
 ACCCCCCCATCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTC
 AAAGGCTTCTATCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGA
 GAACAACCTACAAGACCACCCTCCCGTGTCTGGACTCCGACGGCTCCTTCGCCCTCG
 TGAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
 TCCGTGATGCATGAGGCTCTGCACAACCACTACACCAGAAAGAGCCTCTCCCTGTCT
 TCCCGGCAAG

(配列番号153) シグナル配列(1-57)、NYA-3061(61-813)、linker(814-
 828)、C3E-7096(829-1548)、linker(1549-1554)、Hinge(1555-
 1599)、CH2(1600-1929)、CH3(1930-2250)

[図150]

NYZ-0083-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGAAATCCGGTGGAGGCCCTTGTCGAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCAATTGG
GTCCGACAAGCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTCAAGTGAAGGGGCGGTTTCACAATTTACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCCCTCAGGCCACTACGAGGCCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTGGAGGAGGTGGATCTCAATCCGTTCTGACTCAGCCACCC
TCCGCCCTCTGGCACCCCGGGCCAACGGGTCACAATATCATGTTCTGGCTCTTCAAG
CAACATCGGAAACTGGTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCA
AGCTTCTGATATATGACAACAACAAACGGCCCAAGTGGAGTTCTTGACAGATTCAAGT
GGGTCTAAAAGTGGTACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGA
TGAGGCGGACTATTATTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTT
TCGGCGGAGGTACTAAGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGTGCAGCTG
GTGGAATCCGGGGGGGGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGC
CGCCTCTGGGGTGACATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTG
GAAAGTGTCTGGAGTGGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTAT
CCCGACAGCGTCAAGGGCAGGTTCACAATTTCCCGCGAGAACACACAGAAAACCTCT
GTACCTGCAGATGAATAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTC
TGGACGGCAGGGATGGGTGGGTGCGCTATTGGGGGCAGGGAACCCTGGTGACAGTC
AGCTCCGGAGGAGGAGGATCTGGCGGAGGAGGCAGTGGGGGAGGCGGGTCAAACCTT
TATGCTCACTCAGCCGTCCTCTGTTTCTGGCGTACCTGGCCAACGGGTGACCATTA
GCTGTACGGGTAATACCGGGAATATCGGGTCTAACTACGTGAACTGGTATCAGCAG
CTTCCAGGGACAGCTCCCAAGTTGCTGATCTATCGCGACGACAAAAGACCCTCAGG
GGTCCCTGACCGATTTAGTGGCAGCAAAAAGCGTACTTCCGCTTCCCTGGCGATAA
CCGGCTTTTCAGGCCGAAGATGAGGCAGACTACTATTGCCAGTCATATTCCAGCGGC
TTCATCTTCGGATGTGGAACCTAAGCTGACAGTGTTGGCAGCCGAGCCCAAATCTTC
TGACAAAACCTCACACATGCCACCCTGCCAGCACCTGAAGCCGCAGGGGGACCCCT
CAGTCTTCTCTTCCCCCCTAAACCAAGGACACCCTCATGATCTCCCGGACCCCT
GAGGTCACATGCGTGGTGGTGTGAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACAAAGCCCCGGGAGGAGC
AGTACAACAGCACGTACCGGGTGGTCAGCGTCTCACCGTCTGCACCAGGACTGG
CTGAATGGCAAGGAGTACAAGTGCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCAT
CGAGAAAACCATCTCCAAAGCCAAAGGCCAGCCCCGGGAACCACAGGTGTACGTGT
ACCCCCCATCCCCGGGACGAGCTGACCAAGAACCAGGTGAGCCTGACCTGCCTGGTC
AAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGA
GAACAACCTACAAGACCACCCCTCCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCG
TGAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGC
TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTC
TCCCGGCAAG

(配列番号154) シグナル配列(1-57)、NYA-3061(61-813)、linker(814-828)、C3E-7097(829-1548)、linker(1549-1554)、Hinge(1555-1599)、CH2(1600-1929)、CH3(1930-2250)

[図151]

NYZ-0038-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTLLTVSSGGGGSGGGGSGGGGSSQSVLTQPPSASGT
 PGQRTVISCSSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
 TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYYPDSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGCGLTVTVSSGGG
 GSGGGGSGGGGSGNFMLTQPSSVSGVPGQRTVISTGNTGNIGSNYVNWYQQLPGTC
 PKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSGFIFGG
 GTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCV
 VVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKE
 YKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLVKGFYP
 SDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFSCSVMHE
 ALHNHYTQKSLSLSPGK

(配列番号155) シグナル配列 (1-19)、NYA-2061 (21-266)、linker (267-271)、C3E-7096 (272-511)、linker (512-513)、Hinge (514-528)、CH2 (529-638)、CH3 (639-745)

[図152]

NYZ-0082-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTLLTVSSGGGGSGGGGSGGGGSGGGGSSQSVLTQPP
 SASGTPGQRTVISCSSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFS
 GSKSGTSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQL
 VESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYY
 PDSVKGRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGCGLTVTV
 SSGGGGSGGGGSGGGGSGNFMLTQPSSVSGVPGQRTVISTGNTGNIGSNYVNWYQQ
 LPGTCPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSG
 FIFGGGTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPE
 VTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDW
 LNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYVYPPSRDELTKNQVSLTCLV
 KGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFSC
 SVMHEALHNHYTQKSLSLSPGK

(配列番号156) シグナル配列 (1-19)、NYA-3061 (21-271)、linker (272-276)、C3E-7096 (277-516)、linker (517-518)、Hinge (519-533)、CH2 (534-643)、CH3 (644-750)

[図153]

NYZ-0083-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
VYHCARGSSGHYEAFDIWGQGTLLVTVSSGGGGSGGGSGGGSGGGSGSVLTQPP
SASGTPGQRTVISCSSSSNIGNWYVSWYQQLPGTAPKLLIYDNKRPSGVPDRFS
GSKSGTSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQL
VESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKCLEWVASITRSGGRIYY
PDSVKGRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGTLLTV
SSGGGGSGGGSGGGSGNFMILTQPSVSGVPGQRTVISCNTGNIGSNYVNWYQQ
LPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSYSSG
FIFGCGTKLTVLAAEPKSSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTF
EVTCTVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDW
LNGKEYKCKVSNKALPAPIEKTIKAKGQPREPQVYVPPSRDELTKNQVSLTCLV
KGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFALVSKLTVDKSRWQQGNVFC
SVMHEALHNHYTQKSLSLSPGK

(配列番号157)シグナル配列(1-19)、NYA-3061(21-271)、linker(272-276)、C3E-7097(277-516)、linker(517-518)、Hinge(519-533)、CH2(534-643)、CH3(644-750)

[図154]

NYZ-1010-HC2

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGGTGAGGTACAGCTGGTGGAAATCCGGTGGAGGCCCTTGTGCAACCGGGAGGCTCCC
TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCAATTGG
GTCCGACAAGCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
GTCTCAGAAATATTATGCGGATTCAAGTGAAGGGGCGGTTTCAAAATTCACGAGACG
AGTCAAAGAATACACTGTACCTCCAAATGAATTAAGTGAAGAGCCGAGGATACTGCA
GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCCTTTGATATATGGGG
CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
CCGGAGGAGGTGGAAGTGGAGGAGGTGGATCTCAATCCGTTCTGACTCAGCCACCC
TCCGCCCTCTGGCACCCCGGGCCAACGGGTCAACAATATCATGTTCTGGCTCTTCAAG
CAACATCGGAAACTGGTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCCA
AGCTTCTGATATATGACAACAACAAACGGCCCAAGTGGAGTTCTTGACAGATTCAAGT
GGGTCTAAAGTGGTACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGA
TGAGGCGGACTATTATTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTT
TCGGCGGAGGTACTAAGCTGACCGTCTTGGGAGGAGGCGGTTTCAAGTGCAGCTG
GTGGAATCCGGGGGGGGCCTGGTGCAGCCTGGGGGGAGCCTGAGACTGAGTTGTGC
CGCCTCTGGGGTGACATTTAACTACTATGGCATGTCTTGGATCCGCCAGGCACCTG
GAAAGGGCCTGGAGTGGGTGGCCAGCATCACTAGGTCCGGCGGGCGAATCTACTAT
CCCGACAGCGTCAAGGGCAGGTTTCAAAATTTCCCGCGAGAACACACAGAAAATCT
GTACCTGCAGATGAATAGCCTGAGAGCCGAAGATACAGCTGTGTACTATTGCACTC
TGGACGGCAGGGATGGGTGGGTGCGCTATTGGGGTCAGGGAACCTGGTGACAGTC
AGCTCCGCCTCCACCAAGGGCCCAAGCGTCTTCCCCCTGGCACCTCTCTCAAGAG
CACCTCTGGCGGCACAGCCGCCCTGGGCTGCCTGGTCAAGGACTACTTCCCCGAAC
CCGTGACCGTGAGCTGGAATCAGGCGCCCTGACCAGCGGCGTGACACCTTCCCC
GCTGTCTTGACGTCTCAGGACTCTACTCCCTCAGCAGCGTGGTGACCGTGCCCTC
CAGCAGCTTGGGCACCCAGACCTACATCTGCAACGTGAATCACAAGCCCAGCAACA
CCAAGGTGGACAAGAGAGTTGAGCCCAAGTCTTGGCAGAAAACTCACACATGCCCCA
CCCTGCCCAGCACCTGAAGCCGCAGGGGGACCTCAGTCTTCTCTTCCCCCAAA
ACCAAGGACACCTCATGATCTCCCGGACCCCTGAGGTACATGCGTGGTGGTGT
CAGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAG
GTGCATAATGCCAAGACAAAGCCCCGGGAGGAGCAGTACAACAGCACGTACCGGGT
GGTCAGCGTCTCACTGTCTTGACACAGGACTGGCTGAATGGCAAGGAGTACAAGT
GCAAGGTCTCCAACAAAGCCCTCCCAGCCCCCATCGAGAAAAACATCTCCAAGCC
AAAGGCCAGCCCCGGGAACACAGGTGTACGTGTACCCCCCATCCCGGGACGAGCT
GACCAAGAACCAGGTGAGCTGACCTGCCTGGTCAAAGGCTTCTATCCAGCGACA
TCGCCGTGGAGTGGGAGAGCAATGGCCAGCCCGAGAACAACACTACAAGACCACCCCT
CCCGTGCTGGACTCCGACGGCTCCTTCGCCCTCGTGAGCAAGCTACCGTGAGCAAA
GAGCAGGTGGCAGCAGGGCAACGTCTTCTCATGCTCCGTGATGCATGAGGCTCTGC
ACAACCACTACACCCAGAAGAGCCTCTCCCTGTCTCCCGGCAAG

(配列番号158) シグナル配列 (1-57)、NYA-3061 (61-813)、linker (814-828)、C3E-7085-VH (829-1182)、CH1 (1183-1476)、Hinge (1477-1521)、CH2 (1522-1851)、CH3 (1831-2172)

[図155]

C3E-7085-LC

ATGGTGCTGCAGACCCAGGTGTTTCATCTCCCTGCTGCTGTGGATCTCCGGCGCGTA
 CGGCAACTTTATGCTCACTCAGCCGTCCTCTGTTTCTGGCGTACCTGGCCAACGGG
 TGACCATTAGCTGTACGGGTAATACCGGGAATATCGGGTCTAACTACGTGAACCTGG
 TATCAGCAGCTTCCAGGGACAGCTCCCAAGTTGCTGATCTATCGCGACGACAAAAG
 ACCCTCAGGGGTCCCTGACCGATTTAGTGGCAGCAAAAGCGGTACTTCCGCTTCCC
 TGGCGATAACCGGCTTTTCAAGCCGAAGATGAGGCAGACTACTATTGCCAGTCATAT
 TCCAGCGGCTTCATCTTCCGAGGCGGAACCTAAGCTGACAGTGCTGGGCCAGCCTAA
 GGCTGCCCTAGCGTGACCCCTGTTCCCTCCTTCCAGCGAGGAGCTTCAAGCTAACA
 AGGCCACCCTGGTGTGTCTTATCTCTGACTTCTACCCTGGCGCTGTGACCGTGGCC
 TGGAAGGCTGACAGCTCCCCTGTGAAGGCCGGAGTGGAGACCACCACACCTAGCAA
 GCAGTCTAACAACAAGTACGCTGCCAGCTCCTACCTGAGCCTTACCCCTGAGCAGT
 GGAAGTCTCACAGAAGCTACTCCTGTCAAGTGACCCACGAGGGCAGCACCGTGGAG
 AAGACCGTGGCTCCTACCGAGTGTTC

(配列番号159) シグナル配列 (1-60)、C3E-7085_VL (61-381)、CL (382-699)

[図156]

NYZ-1010-HC2

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGLTVTVSSGGGSGGGGSGGGGSGGGGSGSVLTQPP
 SASGTPGQRTVITSCGSSSNIGNWYVSWYQQLPGTAPKLLIYDNKRPSGVPDRFS
 GSKSGTSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQL
 VESGGGLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIYY
 PDSVKGRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGVVAYWGQGLTVTV
 SSASTKGPSVFPLAPSSKSTSGGTAALGLVKDYFPEPTVSWNSGALTSGVHTFPP
 AVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKRVEPKSCDKTHTCP
 PCPAPAEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVSVSHEDPEVKFNWYVDGVE
 VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
 KGQPREPQVYVPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTPP
 PVLDSDSGFALVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

(配列番号160) シグナル配列 (1-19)、NYA-3061 (21-271)、linker (272-276)、C3E-7085-VH (277-394)、CH1 (395-492)、Hinge (493-507)、CH2 (508-617)、CH3 (618-724)

[図157]

C3E-7085-LC

MVLQTQVFISLLWISGAYGNFMLTQPSVSGVPGQRTVITSGTNTGNIGSNYVNW
 YQQLPGTAPKLLIYRDDKRPSGVPDRFSGSKSGTSASLAITGFQAEDEADYYCQSY
 SSGFIFGGGTKLTVLGQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVA
 WKADSSPVKAGVETTPSKQSNNKYAASSYLSLTPEQWKSHRSYSCQVTHEGSTVE
 KTVAPTECS

(配列番号161) シグナル配列 (1-20)、C3E-7085_VL (21-127)、CL (128-233)

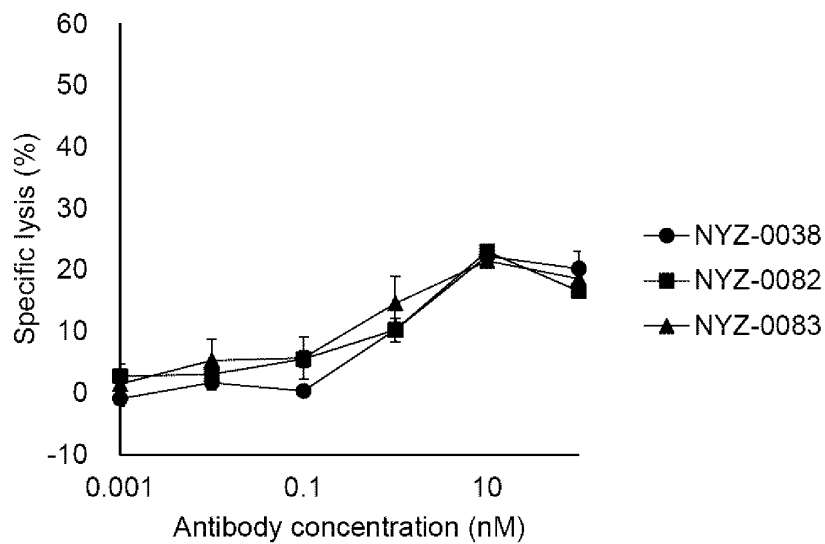
[図158A]

抗体	T2に対する添加物											
	溶媒	ペプチド										
	DMSO	NY-ESO	1F	2M	3A	4A	5A	6L	7F	8A	9A	gp100
NYZ-0038	<u>1.02</u>	57.13	<u>0.66</u>	45.71	29.72	<u>1.39</u>	<u>1.13</u>	47.00	<u>5.56</u>	<u>19.15</u>	58.37	<u>0.37</u>
NYZ-0082	<u>1.02</u>	54.49	<u>0.79</u>	41.13	<u>27.09</u>	<u>2.26</u>	<u>1.74</u>	45.35	<u>10.08</u>	<u>19.93</u>	58.10	<u>0.36</u>
NYZ-0083	<u>1.01</u>	53.60	<u>0.96</u>	41.34	28.94	<u>3.05</u>	<u>2.15</u>	45.85	<u>12.76</u>	<u>22.46</u>	56.72	<u>0.34</u>
NYZ-1010	<u>1.15</u>	43.32	<u>0.86</u>	39.52	<u>21.30</u>	<u>1.05</u>	<u>1.02</u>	37.59	<u>3.86</u>	<u>17.38</u>	51.90	<u>0.53</u>

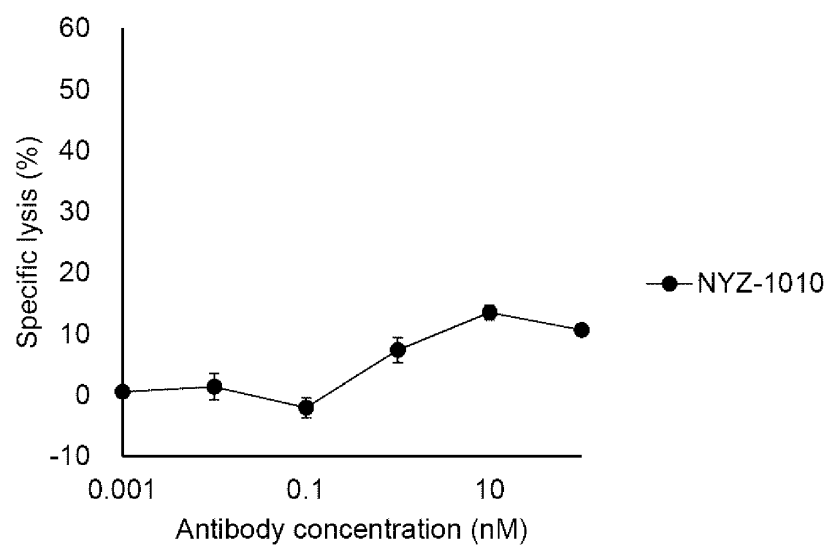
[図158B]

抗体	T2に対する添加物							
	溶媒	ペプチド						
	DMSO	NY-ESO	DOLPP1	IL20RB	PRKD2	CD163	P2RY8	gp100
NYZ-0038	1.07	<u>51.65</u>	0.71	0.70	0.41	0.66	0.89	0.44
NYZ-0082	1.11	<u>47.54</u>	0.69	0.69	0.40	0.62	0.87	0.42
NYZ-0083	1.01	<u>47.17</u>	0.63	0.62	0.37	0.55	0.76	0.38
NYZ-1010	1.19	<u>44.35</u>	0.70	0.88	0.54	0.67	0.95	0.54

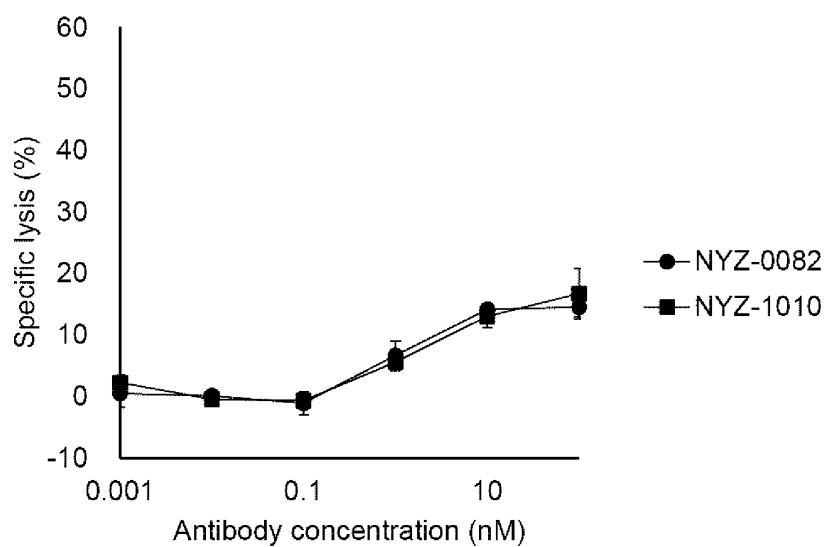
[図159A]



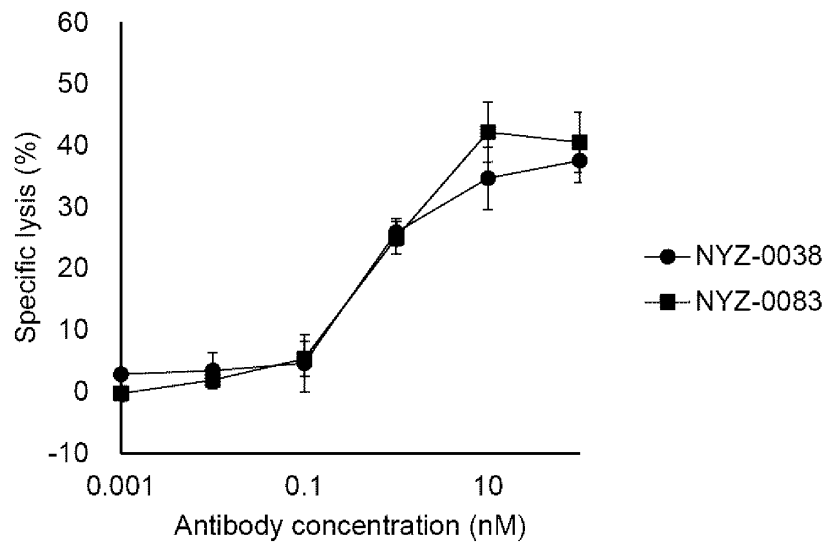
[図159B]



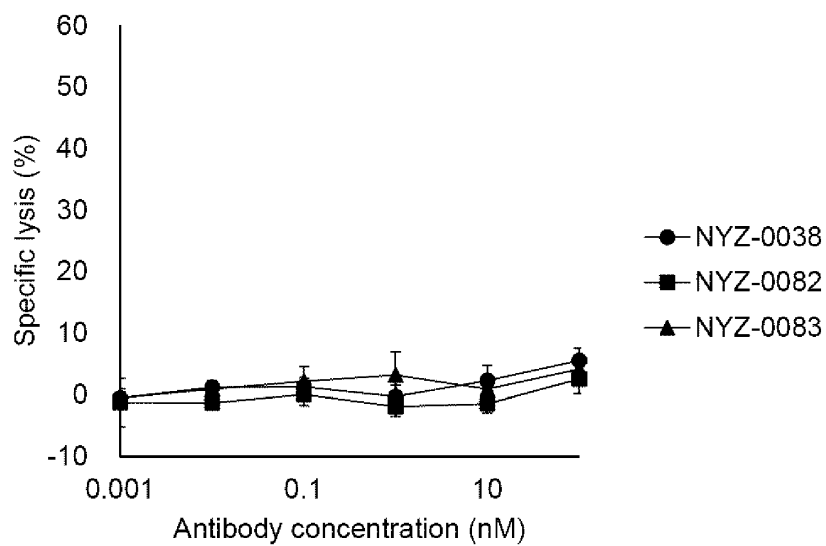
[図159C]



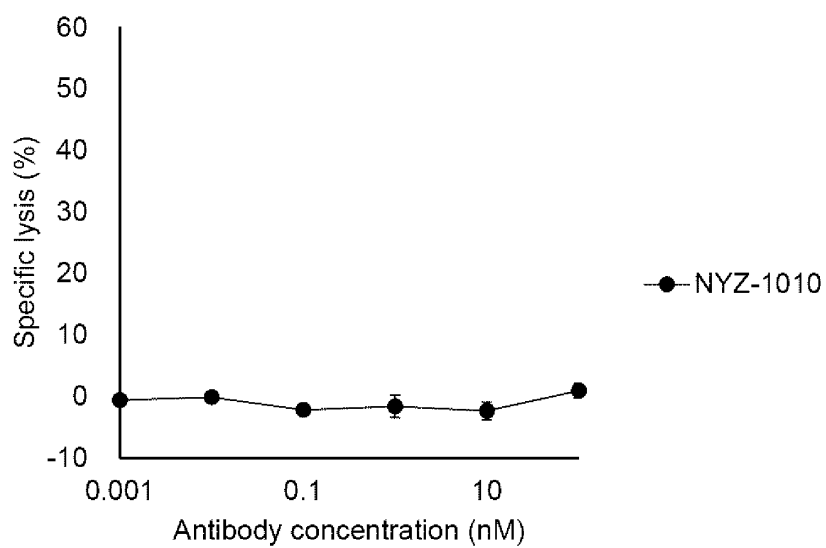
[図159D]



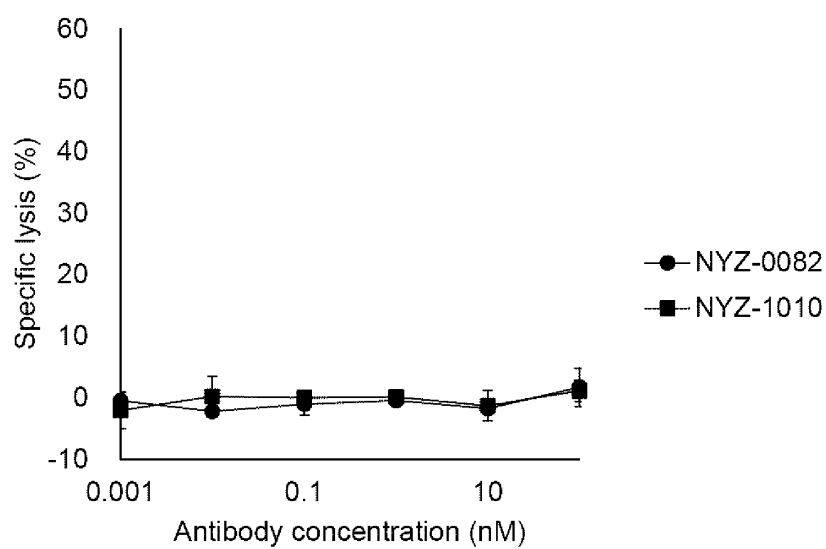
[図159E]



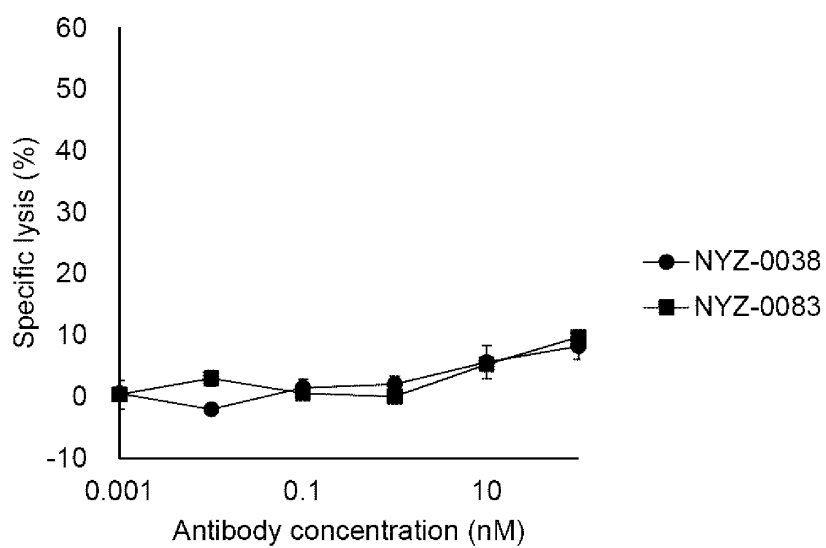
[図159F]



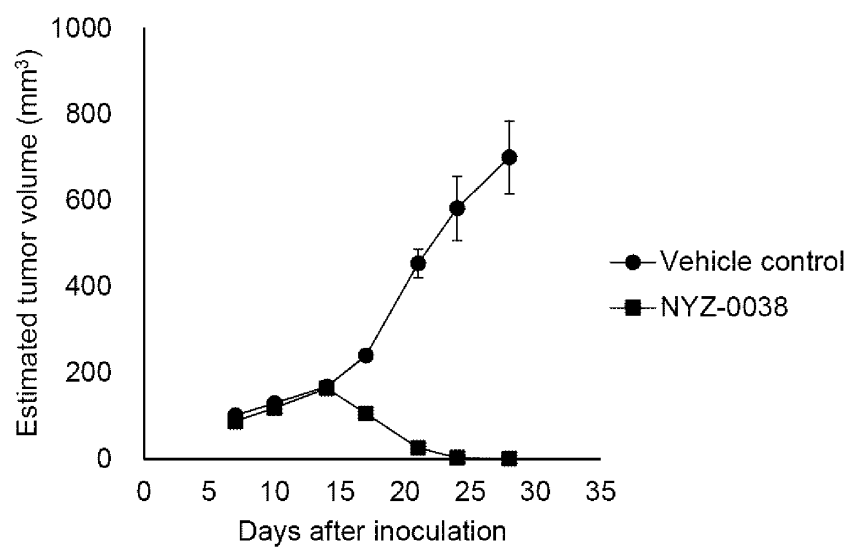
[図159G]



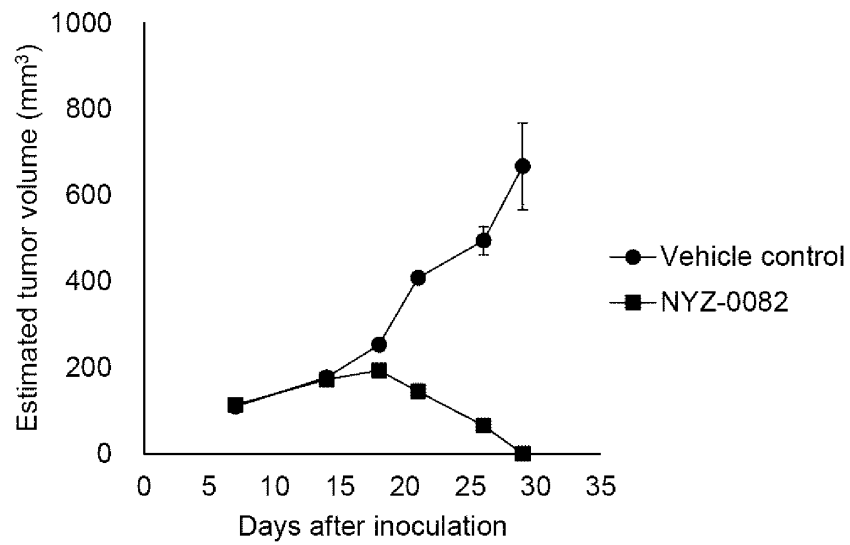
[図159H]



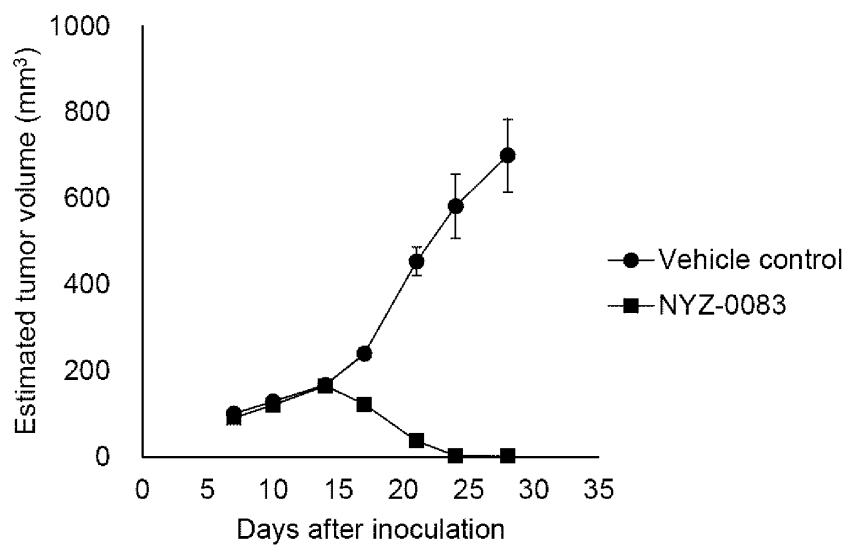
[図160A]



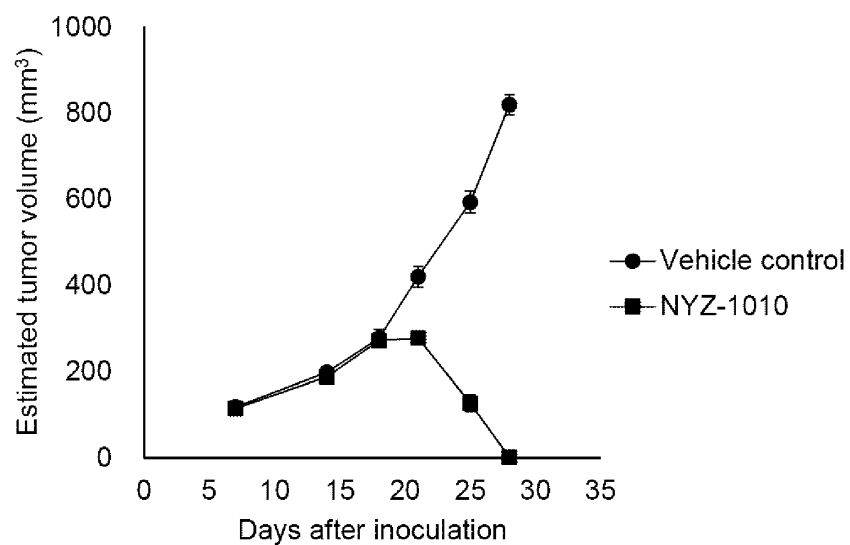
[図160B]



[図160C]



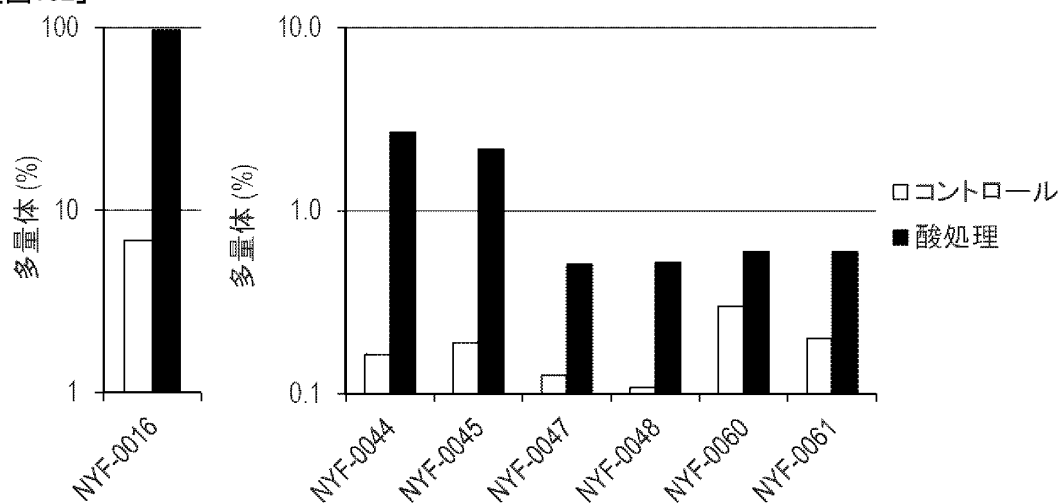
[図160D]



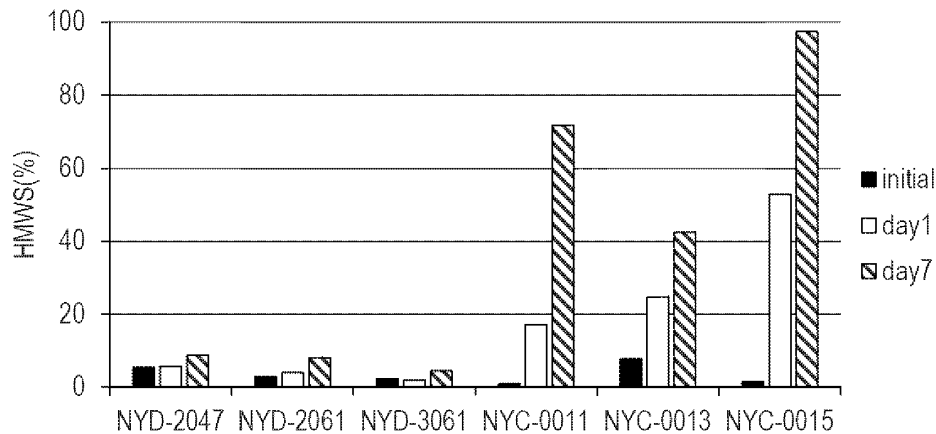
[図161]

GGGSリンカー
GGGS
(配列番号162)

[図162]



[図163]



[図164]

NYA-3061

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
 CGGTGAGGTACAGCTGGTGGGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
 TGCCTACTCTTTCGCGCCGATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCCGACaaGCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTTACGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATTCAGTGAAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCTCAGGCCACTACGAGGCCTTTGATATATGGGG
 CCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTGGAGGAGGTGGATCTCAATCCGTTCTGACTCAGCCACCC
 TCCGCTCTGGCACCCCGGGCCAACGGGTACAAATATCATGTTCTGGCTCTTCAAG
 CAACATCGGAAACTGGTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCA
 AGCTTCTGATATATGACAACAACAAACGGCCCAGTGGAGTTTCTGACAGATTTCAGT
 GGGTCTAAAGTGGTACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGA
 TGAGGCGGACTATTATTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTT
 TCGGCGGAGGTACTAAGCTGACCGTCTTGGGCGCGGCCGAGGTGCAGGTGGTGAT
 TACAAAGATGATGACGATAAAGGTGCAGCGCGCATCACCATCATCACCAC

(配列番号163) シグナル配列 (1-57)、NYA-3061 (61-813)、FLAG-Hisタグ
 (814-891)

[図165]

NYA-3061

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQTLVTVSSGGGSGGGSGGGSGGGSGGGSGSVLTQPP
 SASGTPGQRTVISCSSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFS
 GSKSGTSASLAISGLQSEADYCYCGTWDSSLSAPWVFGGGTKLTVLGAAAGAGGD
 YKDDDDKGAAHHHHHH

(配列番号164) シグナル配列 (1-19)、NYA-3061 (21-271)、FLAG-Hisタグ
 (272-297)

[図166]

NYC-0005

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGTTGTC
TGGCGAAGTGCAGCTGGTGGGAATCTGGTGGCGGAGTTGTTCAGCCTGGCGGCTCTC
TGAGACTGAGCTGTGTGGCCAGCGGCTTCACCTTCGACGACTACGCCATGTACTGG
GTCCGACAGGTGCCAGGCAAGGACCTGGAATGGGTGTCCCTGATTTCTGGCGACGG
CGACATCACCTACTACGTGGACTCTGTGAAGGGCAGATTACCGTGTCCAGAGACA
ACAACAAGAACAGCCTGTACCTGCAGATGAAGTCCCTGCGCGTGGAAGATACAGCC
CTGTACTACTGCGCCAAGGACATGATCTACTACGCCTCTTGGAGCGGCTACGGCAG
CAGCGATTACTACTACTATGTGATGGACGTGTGGGGCCAGGGCACCACCGTTACAG
TTTCTAGCGGAGGCGGAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGAT
ATCCAGATGACACAGAGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGAC
CATCACCTGTAGAGCCAGCCAGAGCATCAGCAGCTACCTGAACTGGTATCAGCAGA
AGCCCCGCAAGGCCCTAAACTGCTGATCTATGCCGCCTCCAGTCTGCAGAGCGGA
GTGCCTAGCAGATTTTCTGGCAGCGGCTCCGGCACCGATTTACCCCTGACCATATC
TAGCCTGCAGCCTGAGGACTTCGCCACCTACTATTGCCAGCAGAGCTACAGCACCC
CTCCTATCACCTTTGGCCAGGGAACCAGACTGGAAATCAAAGGCGCTGCTGCAGGC
GCTGGCGGCGACTACAAAGACGATGATGATAAGGGCGCTGCCGCTCACCACCACCA
TCACCAT

(配列番号165) シグナル配列 (1-57)、NYC-0005 (61-825)、FLAG-Hisタグ
(826-903)

[図167]

NYC-0005

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCVASGFTFDDYAMYW
VRQVPKDLWVSLISGDGDITYYVDSVKGRFTVSRDNNKNSLYLQMKSLRVEDTA
LYYCAKDMIYYASWSGYGSSDYVVMDVWGQTTVTVSSGGGSGGGGSGGGGSD
IQMTQSPSSLSASVGRVTITCRASQSISSYLNWYQQKPKAPKLLIYAASSLQSG
VPSRFSGSGSGTDFTLTISSLQPEDFATYYCQQSYSTPPITFGQGRLEIKGAAAG
AGGDYKDDDDKGAAHHHHHH

(配列番号166) シグナル配列 (1-19)、NYC-0005 (21-275)、FLAG-Hisタグ
(276-301)

[図168]

NYC-0006

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGTTGTC
TGGCGAAGTGCAGCTGGTGGGAATCTGGTGGCGGAGTTGTTTCAACCTGGCGGCTCTC
TGAGACTGTCTTGTGCCGCCAGCGGCTTCACCTTCGACGACTACGCCATGTACTGG
GTCCGACAGGCCCCCTGGCAAAGGCCTTGAATGGGTGTCCCTGATCAGCGGAGATGG
CGGCAGCATGTACTACGCCGATAGCGTGAAGGGCAGATTACCATCAGCCGGGACA
ACAGCAAGAACAGCCTGTACCTGCAGATGAACTCCCTGCGGACCGAGGACACAGCC
CTGTACTACTGCGCCAAGGATATGATCTTCTACGCCTTTTGGAGCGGCTACGGCAG
CAGCGATTACTACTACTACGTGATGGACGTGTGGGGCCAGGGCACCACAGTGACAG
TTTATTCTGGCGGCGGAGGATCTGGCGGAGGTGGAAGCGGAGGCGGTGGATCTGAT
ATCCAGATGACACAGAGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGAC
CATCACCTGTGGGGCCAGCCAGAGAATCAGCACCTACCTGAACTGGTATCAGCAGA
AGCCCGGCAAGGCCCCCTAAGCTGCTGATCTATGCTGCCTCCAGTCTGCAGAGCGGC
GTGCCAAGCAGATTTTCTGGCAGCGGCTCTGGCACCGACTTCACCCTGACCATATC
TAGCCTGCAGCCTGAGGACTTCGCCACCTACTACTGCCAGCAGAGCTACAGCACCC
CTCCTATCACCTTTGGCCAGGGAACCAGACTGGAAATCAAAGGCGCTGCTGCAGGC
GCAGGCGGCGACTACAAAGACGATGATGATAAGGGCGCTGCCGCTCACCACCACCA
TCACCAT

(配列番号167) シグナル配列 (1-57)、NYC-0006 (61-825)、FLAG-Hisタグ
(826-903)

[図169]

NYC-0006

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAASGFTFDDYAMYW
VRQAPGKGLEWVSLISGDGGSMTYADSVKGRFTISRDNKNSLYLQMNSLRTEDTA
LYYCAKDMIFYAFWSGYGSSDYVMDVWGQGTITVTVYSGGGSGGGGSGGGGSD
IQMTQSPSSLSASVGRVTITCRASQRISTYLNWYQQKPKAPKLLIYAASSLQSG
VPSRFGSGSGTDFTLTISLQPEDFATYYCQQSYSTPPIITFGQTRLEIKGAAAG
AGGDYKDDDDKGAAAHHHHHH

(配列番号168) シグナル配列 (1-19)、NYC-0006 (21-275)、FLAG-Hisタグ
(276-301)

[図170]

NYC-0007

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGTTGTC
 TGGCGAAGTGACAGCTGGTGGAATCTGGTGGCGGAGTTGTTAGCCTGGCGGCTCTC
 TGAGACTGTCTTGTGCCGCCAGCGGCTTCACCTTCGACGATTATGCCATGCACTGG
 GTCCGACAGGCCCCCTGGCAAAGGACTTGAATGGGTGTCCCTGATCAGCGGCGACGG
 CGACAATACCTACTACGCCGATAGCGTGAAGGGCAGATTACCATCAGCCGGGACA
 ACAACAAGAACAGCCTGTACCTGCAGATGAACTCCCTGCGGACCGAGGACACCGCC
 TTCTACTACTGTGCCAAAGAGCTGATCTTCGGCAAGGTGCTGCACGACTTTTACTA
 CTACGTGATGGACGTGTGGGGCCAGGGCACCACAGTGACAGTTTCTAGCGGAGGCG
 GAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGATATCCAGATGACACAG
 AGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGACCATCACCTGTAGAGC
 CAGCCAGAGCATCAGCAGCTACCTGAACTGGTATCAGCAGAAGCCCGCAAGGCC
 CTAAGCTGCTGATCTATGCCGCCTCCAGTCTGCAGAGCGGAGTGCCTAGCAGATTT
 TCTGGCAGCGGCTCCGGCACCGATTTACCCCTGACCATATCTAGCCTGCAGCCTGA
 GGACTTCGCCACCTACTACTGCCAGCAGAGCTACAGCACCCCTCCTATCACCTTTG
 GCCAGGGAAACCAGACTGGAAATCAAAGGCGCTGCTGCAGGCGCAGGCGGCGACTAC
 AAAGACGATGATGATAAGGGCGCTGCCGCTCACCACCACCATCACCAT

(配列番号169) シグナル配列(1-57)、NYC-0007(61-810)、FLAG-Hisタグ
 (811-888)

[図171]

NYC-0007

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAASGFTFDDYAMHW
 VRQAPGKGLEWVSLISGDNTYYADSVKGRFTISRDNKNLSLYLQMNSLRTEDTA
 FYYCAKELIFGKVLHDFYYYVMDVWGQGTTVTVSSGGGGSGGGSGGGSGDIQMTQ
 SPSSLSASVGDRTTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRF
 SGSGSGTDFTLTISSLQPEDFATYYCQQSYSTPPITFGQGRLEIKGAAAGAGGDY
 KDDDDKGAHHHHHHH

(配列番号170) シグナル配列(1-19)、NYC-0007(21-270)、FLAG-Hisタグ
 (271-296)

[図172]

NYC-0008

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGTTGTC
 TGGCGAAGTGACAGCTGGTGGAATCTGGTGGCGGAGTTGTTAGCCTGGCGGCTCTC
 TGAGACTGAGCTGTGAAGCCTCCGGCTTCATCTTCGACGACTACGCCATGCACTGG
 GTCCGACAGGCACCTGGCAAAGGCCTTGAATGGGTGTCCCTGATCTCTGGCGACGG
 CGACATCATCTACTACGCCGACTCTGTGAAGGGCAGATTACCATCAGCCGGGACA
 ACAGCAAGAACAGCCTGTACCTGCAGATGAACTCCCTGATCATCGAGGACACAGCC
 CTGTACTACTGCGCCAAGGATTGGGTGTTCCGGCGTCGTGATGACCACTACTGGTA
 CTTCCGGCTGGATGTGTGGGGCCAGGGAACCACAGTGACAGTTTCTAGCGGAGGCG
 GAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGATATCCAGATGACACAG
 AGCCCCAGCAGCCTGTCTGCCTCTGAAGGCGACAGAGTGACCATCACCTGTAGAGC
 CAGCCAGAGCATCAGCACCTACCTGAACTGGTATCAGCAGAAGCCCGCAAGGCC
 CTAAGCTGCTGATCTATGGTGCCTCCAGTCTGCAGAGCGGCGTGCCAAGCAGATTT
 TCTGGCAGCGGCTCTGGCACCGACTTCACCCCTGACCATATCTAGCCTGCAGCCTGA
 GGACTTCGCCACCTACTACTGCCAGCAGTCTTACAGCACCCCTCCTATCACATTTG
 GCCAGGGCACCAAGGTGGAAATCAAAGGCGCTGCTGCAGGCGCTGGCGGCGACTAC
 AAAGACGATGATGATAAGGGCGCTGCCGCTCACCACCACCATCACCAT

(配列番号171) シグナル配列(1-57)、NYC-0008(61-810)、FLAG-Hisタグ
 (811-888)

[図173]

NYC-0008

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCEASGFIFDDYAMHW
 VRQAPGKGLEWVSLISGDGDIIYYADSVKGRFTISRDNKNSLYLQMNSLIIEDTA
 LYYCAKDWVFGVVMTHYWFGLDVWGQGTTVTVSSGGGGSGGGSGGGSDIQMTQ
 SPSSLSASEGDRVTTITCRASQSISTYLNWYQQKPGKAPKLLIYGASSLQSGVPSRF
 SGSGSGTDFTLTITSSLPEDFATYYCQQSYSTPPITFGQGTKVEIKGAAAGAGGDY
 KDDDDKGAHHHHHHH

(配列番号172) シグナル配列 (1-19)、NYC-0008 (21-270)、FLAG-Hisタグ
 (271-296)

[図174]

NYC-0009

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGTTGTC
 TGGCGAAGTGCAGCTGGTGGAATCTGGTGGCGGAGTTGTTACGCCTGGCGGCTCTC
 TGAGACTGTCTTGTGCGCCAGCGGCTTCACCTTCGACGATTATGCCATGCACTGG
 GTCCGACAGGCCCCCTGGCAAAGGACTTGAATGGGTGTCCCTGATCTCTGGCGGAGG
 CGGCGGAACCTACTACAGCGATTCTGTGAAGGGCAGATTCACCATCAGCCGGGACA
 CCAGCAAGGACAGCCTGTACCTGCAGATGAACAGCCTGCGGACCGAGGACACAGCC
 CTGTACTACTGCGCCAAGGACATGGTGTTCGGCGTGGTCACCCCTTACTACTACTT
 CGCCCTGGATGTGTGGGGCCAGGGCACAAAGTGACAGTCTCTTCTGGCGGCGGAG
 GAAGCGGAGGCGGAGGATCCGGTGGTGGTGGATCTGACATCCAGATGACACAGAGC
 CCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGACCATCACCTGTAGAGCCAG
 CCAGAGCATCAACAGCTACCTGAACTGGTATCAGCAGAAGCCCGCAAGGCCCTTA
 AGCTGCTGATCTATGCTGCCTCCAGTCTGCAGAGCGGCGTGCCAAGCAGATTTTCT
 GGCAGCGGCTCTGGCACCGAATTCACCTGACCATATCTAGCCTGCAGCCTGAGGA
 CTTTCGCCACCTACTACTGCCAGCAGAGCTACAGCGCCCCCTCCTATCACATTTGGCC
 AGGGAACCAGACTGGAAATCAAAGGCGCTGCTGCAGGCGCAGGCGGCGACTACAAA
 GACGATGATGATAAGGGCGCTGCCGCTCACCACCATCACCATCAT

(配列番号173) シグナル配列 (1-57)、NYC-0009 (61-807)、FLAG-Hisタグ
 (808-885)

[図175]

NYC-0009

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAASGFTFDDYAMHW
 VRQAPGKGLEWVSLISGGGGTYYSDSVKGRFTISRDTSKDSLQNMNSLRTEETA
 LYYCAKDMVFGVVTPYYYFALDVWGQGTTVTVSSGGGGSGGGSGGGSDIQMTQS
 PSSLSASVGDRTTITCRASQSINSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFS
 GSGSGTDFTLTITSSLPEDFATYYCQQSYSAAPPITFGQGTTRLEIKGAAAGAGGDYK
 DDDDKGAHHHHHHH

(配列番号174) シグナル配列 (1-19)、NYC-0009 (21-269)、FLAG-Hisタグ
 (270-295)

[図176]

NYC-0010

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGTTGTC
TGGCGAAGTGCAGCTGGTGAATCTGGTGGCGGAGTTGTTAGCCTGGCGGCTCTC
TGAGACTGAGCTGTGCTGTGTCCGGCTTCACCTTCGACGACTACGCCATGCACTGG
GTCCGACAGGCACCTGGCAAAGGCCCTTGAATGGGTGTCCCTGATCAGCGGAGATGG
CGGCAGCACACACTACGCCGATTCTGTGAAGGGCAGATTACCATCAGCCGGGACA
ACAGCAAGAACAGCCTGTACCTGCAGATGAACTCCCTGCGGACAGGCGACACAGCC
CTGTACTACTGCGCCAAGGACATGATCTTCGCCGTGGTCATCACCGACTACCACTA
CTACGGCATGGACGTGTGGGGCCAGGGAACACAGTGACAGTTTCTAGCGGAGGCG
GAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGATATCCAGATGACACAG
AGCCCCAGCAGCCTGTCTGCCCTCTGTGGGAGACAGAGTGACCATCACCTGTAGAGC
CAGCCAGAGCATCAGCAGCTACCTGAACTGGTATCAGCAGAAGCCCGCAAGGCC
CTAAACTGCTGATCTATGCCGCCCTCCAGTCTGCAGAGCGGAGTGCCTAGCAGATTT
TCTGGCAGCGGCTCCGGCACCGATTTACCCCTGACCATATCTAGCCTGCAGCCTGA
GGAATTGCGCCACCTACTACTGCCAGCAGAGCTACAGCACCCCTCCTATCACCTTTG
GCCAGGGCACCAGACTGGAAATCAAAGGCGCTGCTGCAGGCGCTGGCGGCGACTAC
AAAGACGATGATGATAAGGGCGCTGCCGCTCACCACCACCATCACCAT

(配列番号175) シグナル配列 (1-57)、NYC-0010 (61-810)、FLAG-His タグ
(811-888)

[図177]

NYC-0010

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAVSGFTFDDYAMHW
VRQAPGKGLEWVSLISGDDGGSTHYADSVKGRFTISRDNKNSLYLQMNSLRITGDTA
LYYCAKDMIFAVVITDYHYYGMDVWGQGTITVTVSSGGGGSGGGGSGGGGSDIQMTQ
SPSSLSASVGDRTITCRASQSISSYLNWYQQKPKAPKLLIYAASSLQSGVPSRF
SGSGSGTDFTLTISSSLQPEDFATYYCQQSYSTPPIITFGQGRLEIKGAAAGAGGDY
KDDDDKGAAAHHHHHH

(配列番号176) シグナル配列 (1-19)、NYC-0010 (21-270)、FLAG-His タグ
(271-296)

[図178]

HC-h

ATGAAACACCTGTGGTTCTTCCTCCTGCTGGTGGCAGCTCCCAGATGGGTGCTGAG
CGACAAAACCTCACACATGCCACCCCTGCCCAGCACCTGAAGCCGCCGGCGGACCCT
CAGTCTTCCTCTTCCCCCAAACCCAAGGACACCCCTCATGATCTCCCGGACCCCT
GAGGTCACATGCGTGGTGGTGGACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAA
CTGGTACGTGGACGGCGTGGAGGTGCATAATGCCAAGACCAAGCCTAGAGAGGAAC
AGTACAACAGCACCTACCGGTGGTGTCCGTGCTGACAGTGCTGCACCAGGACTGG
CTGAACGGCAAAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCCCCCAT
CGAGAAAACCATCAGCAAGGCCAAGGGCCAGCCCCGCGAACCTCAAGTGTGCACCC
TGCCACCCCTCCCGGGATGAGCTGACCAAGAACCAGGTGTCCCTGAGCTGTGCCGTG
AAGGGCTTCTACCCCTCCGATATCGCCGTGGAATGGGAGAGCAACGGCCAGCCCGA
GAACAACCTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCTCATTTCTCCTGG
TGTCCAAGCTGACCGTGGACAAGTCCAGATGGCAGCAGGGCAACGTCTTCTCATGC
TCCGTGATGCATGAGGCTCTGCACAACCACTACACCCAGAAGAGCCTCTCCCTGTC
TCCCGGCAAA

(配列番号177) シグナル配列 (1-57)、定常領域 (58-738)

[図179]

HC-h

MKHLWFFLLLVAAAPRWVLSDKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVCTLPSPRDELTKNQVSLSCAVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

(配列番号178) シグナル配列 (1-19)、定常領域 (20-246)

[図180]

NYD-2047-HC-k

ATGAAGCACCTGTGGTTCCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGCTGGTCAAGTACAGCTGGTGAATCCGGTGGAGGCGTGGTCCAGCCGGGACGCAGCTTGAGACTGTCCTGCGCTGCATCTGGCTTTTCCATACGATCCTACGATATGCACTGGGTTTCGCCAAGCCCCCTGGCAAAGGTCTTGAATGGGTGCGCACTATCTCCTACGACGGGTCTCAGAAATATTACGCGGATTCAGTGAAGGGGCGGTTCAACAATTTACGGGACAATTCAAAGAATACCTTGTATCTCCAGATGTCTTCACTGAGAGCCGAGGATACTGCAGTCTATCATTGTGCAAGAGGGTCCTCAGGCCACTACGAGGCCTTTGATATATGGGGCCAAGGCACCTTGGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTTCCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGTGAGTGACGCGCTGGACAGAAGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTGTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATGACAACAACAAACGGGCCAGTGGAATCCCTGACAGATTCAAGTGGGTCTAAAAGTGGTACAAGCGCTACCCTGGGTATCACCGGATTGCAGACCGGAGATGAGGCGGACTATTA TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTCGGCGGAGGTACTAAGGTTACCGTCTTGGGCGGAGAACCCAAGAGCgcaGACAAGACCCACACCTGTCTCCATGTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTTTCTGTTCCCTCCAAAGCCTAAGGACACCCTGATGATCAGCCGGACACCTGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAGGATCCCGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGGAAGTGACACAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACAGCACCTACAGAGTGGTGTCTGTGCTGACAGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCCTAGGGAACCCAGGTTTACACCCTGCCTCCATGCAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCTGGTTAAGGGCTTCTACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAACACTACAAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTTCTGTACAGCAAGCTGACCGTGGAACAAGCAGATGGCAGCAGGGCAACGTGTTCAAGCTGCAGCGTGATGCACGAGGCCCTGCAACCACTACACACAGAAGTCCCTGTCTCTGAGCCCCGGCAAA

(配列番号179) シグナル配列 (1-57)、NYA-2047 (61-798)、リンカー (799-804)、定常領域 (805-1500)

[図181]

NYD-2047-HC-k

MKHLWFFLLLVAAPRWVLSGQVQLVESGGGVVQPGRSLRLSCAASGFSIRSYDMHW
 VRQAPGKGLEWVATISYDGSQKYADSVKGRFTISRDN SKNTLYLQMSSLRAEDTA
 VYHCARGSSSGHYEAFDIWGQGT LVT VSSGGGSGGGGSGGGGSSQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGEPKSADKTHTCP
 PCPAPEAAGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVE
 VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
 KGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYKTTTP
 PVLDSGGSFFLYSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKSLSLSPGK
 (配列番号180) シグナル配列 (1-19)、NYA-2047 (21-266)、リンカー (267-
 268)、定常領域 (269-500)

[図182]

NYD-2061-HC-k

ATGAAGCACCTGTGGTTCCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
 TGGTGAGGTACAGCTGGTGGAATCCGGTGGAGGCCTTGTCGAACCGGGAGGCTCCC
 TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCCGACaaGCCCTGGCAAAGGTCTTGAATGGGTGCGCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTCACTGAAGGGGCGGTTTCAAAATTTACGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATCACTGAGAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCCTCAGGCCACTACGAGGCCTTTGATATATGGGG
 CCAAGGCACCTTGTAACCGTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTCAATCCGTTCTGACTCAGCCACCCTCCGCCTCTGGCACC
 CCGGGCCAACGGGTCACAATATCATGTTCTGGCTCTTCAAGCAACATCGGAAACTG
 GTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCAAGCTTCTGATATATG
 ACAACAACAAACGGCCCACTGGAGTTCTTGACAGATTCACTGGGTCTAAAAGTGGT
 ACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGATGAGGCGGACTATTA
 TTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTTTCGGCGGAGGTACTA
 AGCTGACCGTCTTTGGGCGGAGAACCCAAAGAGCgaGACAAGACCCACACCTGTCTCT
 CCATGTCTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTTTTCTGTTCCCTCCAAA
 GCCTAAGGACACCTTGATGATCAGCCGGACACCTGAAGTGACCTGCGTGGTGGTGG
 ATGTGTCCCACGAGGATCCCGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGGA
 GTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACAGCACCTACAGAGT
 GGTGTCTGTGCTGACAGTGCTGCACCAGGACTGGCTGAACGGCAAAGAGTACAAGT
 GCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAAACCATCAGCAAGGCC
 AAGGGCCAGCCTAGGGAACCCAGGTTTACACCCTGCCTCCATGCAGGGATGAGCT
 GACCAAGAACCAGGTGTCCCTGTGGTGCTGGTTAAGGGCTTCTACCCCTCCGATA
 TCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAACCTACAAGACAACCCCT
 CCTGTGCTGGACTCCGACGGCTCATTCTTCCTGTACAGCAAGCTGACCGTGACAAA
 GAGCAGATGGCAGCAGGGCAACGTGTTCACTGCTGCAGCGTGATGCACGAGGCCCTGC
 ACAACCACTACACACAGAAGTCCCTGTCTCTGAGCCCCGGCAAA

(配列番号181) シグナル配列 (1-57)、NYA-2061 (61-798)、リンカー (799-
 804)、定常領域 (805-1500)

[図183]

NYD-2061-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSSGHYEAFDIWGQGTLLVTVSSGGGSGGGGSGGGGSSQSVLTQPPSASGT
 PGQRVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
 TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGEPKSADKTHTCP
 PCPAPEAAGGPSVFLFPPKPKDTLMI SRTPEVTCVVVDVSHEDPEVKFNWYVDGVE
 VHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKA
 KGQPREPQVYTLPPCRDELTKNQVSLVWCLVKGFYPSDIAVEWESNGQPENNYKTTT
 PVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMEALHNHYTQKSLSLSPGK
 (配列番号182) シグナル配列 (1-19)、NYA-2061 (21-266)、リンカー (267-
 268)、定常領域 (269-500)

[図184]

NYD-3061-HC-k

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
 TGGTGAGGTACAGCTGGTGAATCCGGTGGAGGCCTTGTGCAACCGGGAGGCTCCC
 TGCGACTCTCTTGCGCCGCATCTGGCTTTTCCATACGATCCTACGATATTCATTGG
 GTCCGACaaagCCCCCTGGCAAAGGTCTTGAATGGGTTGCCACTATCTCCTACGACGG
 GTCTCAGAAATATTATGCGGATTTCAGTGAAGGGGCGGTTTCAAAATTCACGAGACG
 AGTCAAAGAATACACTGTACCTCCAAATGAATTCACTGAGAGCCGAGGATACTGCA
 GTCTATCATTGTGCAAGAGGGTCCCTCAGGCCACTACGAGGCCTTTGATATATGGGG
 CCAAGGCACCTTGTTAACCCTTAGTAGCGGAGGTGGAGGAAGCGGAGGCGGCGGTT
 CCGGAGGAGGTGGAAGTGGAGGAGGTGGATCTCAATCCGTTCTGACTCAGCCACCC
 TCCGCCTCTGGCACCCCGGGCCAACGGGTCACAATATCATGTTCTGGCTCTTCAAG
 CAACATCGGAAACTGGTACGTGAGCTGGTACCAGCAGCTCCCCGGCACGGCGCCCA
 AGCTTCTGATATATGACAACAACAACGGCCAGTGGAGTTCTTGACAGATTCACT
 GGGTCTAAAAGTGGTACAAGCGCTAGCCTGGCCATAAGTGGTCTGCAGAGTGAAGA
 TGAGGCGGACTATTATTGCGGAACCTGGGACTCCAGCCTGAGCGCTCCCTGGGTTT
 TCGGCGGAGGTACTAAGCTGACCGTCTTGGGCGGAGAACC CAAGAGCGCAGACAAG
 ACCCACACCTGTCTCCATGTCTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTT
 TCTGTTCCCTCCAAAGCCTAAGGACACCCTGATGATCAGCCGGACACCTGAAGTGA
 CCTGCGTGGTGGTGGATGTGTCCACGAGGATCCCGAAGTGAAGTTCAATTGGTAC
 GTGGACGGCGTGAAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAA
 CAGCACCTACAGAGTGGTGTCTGTGCTGACAGTGTGTCACCAGGACTGGCTGAACG
 GCAAAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAA
 ACCATCAGCAAGGCCAAGGGCCAGCCTAGGGAACCCAGGTTTACACCCTGCCTCC
 ATGCAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCCTGGTTAAGGGCT
 TCTACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAAC
 TACAAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTTCTGTACAGCAA
 GCTGACCGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTTTCACTGCAGCGTGA
 TGCACGAGGCCCTGCACAACCACTACACACAGAAGTCCCTGTCTCTGAGCCCCGGC
 AAA

(配列番号183) シグナル配列 (1-57)、NYA-3061 (61-813)、リンカー (814-
 819)、定常領域 (820-1515)

[図185]

NYD-3061-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSYDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSSGHYEAFDIWGQGTLLVTVSSGGGGSGGGSGGGSGGGGSQSVLTQPP
 SASGTPGQRVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFS
 GSKSGTSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGEPKSADK
 THTCPPCPAPEAAGGFSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWY
 VDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK
 TISKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENN
 YKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSLSPG
 K

(配列番号184) シグナル配列 (1-19)、NYA-3061 (21-271)、リンカー (272-273)、定常領域 (274-505)

[図186]

NYC-0011-HC-k

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
 TGGCGAAGTGACAGCTGGTGGGAATCTGGTGGCGGAGTTGTTACGCCTGGCGGCTCTC
 TGAGACTGAGCTGTGTGGCCAGCGGCTTCACCTTCGACGACTACGCCATGTACTGG
 GTCCGACAGGTGCCAGGCAAGGACCTGGAATGGGTGTCCCTGATTTCTGGCGACGG
 CGACATCACCTACTACGTGGACTCTGTGAAGGGCAGATTACCGTGTCCAGAGACA
 ACAACAAGAAGACAGCCTGTACCTGCAGATGAAGTCCCTGCGCGTGGAAGATACAGCC
 CTGTACTACTGCGCCAAGGACATGATCTACTACGCCCTCTTGGAGCGGCTACGGCAG
 CAGCGATTACTACTACTATGTGATGGACGTGTGGGGCCAGGGCACCAACCGTTACAG
 TTTCTAGCGGAGGCGGAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGAT
 ATCCAGATGACACAGAGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGAC
 CATCACCTGTAGAGCCAGCCAGAGCATCAGCAGCTACCTGAACTGGTATCAGCAGA
 AGCCCCGCAAGGCCCTAAACTGCTGATCTATGCCGCCCTCCAGTCTGCAGAGCGGA
 GTGCCTAGCAGATTTTCTGGCAGCGGCTCCGGCACCGATTTACCCCTGACCATATC
 TAGCCTGCAGCCTGAGGACTTCGCCACCTACTATTGCCAGCAGAGCTACAGCACCC
 CTCCTATCACCTTTGGCCAGGGAACCAGACTGGAAAATCAAAGGCGGAGAAACCAAG
 AGCGcaGACAAGACCCACACCTGTCTCCATGTCTGCTCCAGAAGCTGCAGGCGG
 CCCTTCCGTGTTTCTGTTCCCTCCAAAGCCTAAGGACACCCTGATGATCAGCCGGA
 CACCTGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAGGATCCCCGAAGTGAAG
 TTCAATTGGTACGTGGACGGCGTGGAAGTGACAACGCCAAGACCAAGCCTAGAGA
 GGAACAGTACAACAGCACCTACAGAGTGGTGTCTGTGCTGACAGTGTGCACCAGG
 ACTGGCTGAACGGCAAAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCT
 CCTATCGAGAAAACCATCAGCAAGGCCAAGGGCCAGCCTAGGGAACCCCAAGTTTA
 CACCCTGCCTCCATGCAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCC
 TGGTTAAGGGCTTCTACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAG
 CCAGAGAACTACAAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTT
 CCTGTACAGCAAGCTGACCGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTTCA
 GCTGCAGCGTGATGCACGAGGCCCTGCACAACCACTACACACAGAAGTCCCTGTCT
 CTGAGCCCCGGCAA

(配列番号185) シグナル配列 (1-57)、NYC-0005 (61-825)、リンカー (826-831)、定常領域 (832-1527)

[図187]

NYC-0011-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCVASGFTFDDYAMYW
 VRQVPKDLWVSLISGDGDIYYVDSVKGRFTVSRDNNKNSLYLQMKSLRVEDTA
 LYYCAKDMIYYASWSGYGSSDYVVMDVWGQTTVTVSSGGGSGGGSGGGSGD
 IQMTQSPSSLSASVGDRTITCRASQSISSYLNWYQKPGKAPKLLIYAASSLQSG
 VPSRFSGSGSDFTLTISLQPEDFATYYCQQSYSTPPITFGQGRLEIKGGEPK
 SADKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK
 FNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPA
 PIEKTIKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQ
 PENNYKTTTPVLDSGDSFFLYSKLTVDKSRWQQGNVFSQSVMEALHNHYTQKSLS
 LSPGK

(配列番号186) シグナル配列 (1-19)、NYC-0005 (21-275)、リンカー (276-277)、定常領域 (278-509)

[図188]

NYC-0012-HC-k

ATGAAGCACCTGTGGTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
 TGGCGAAGTGACGCTGGTGGAACTCTGGTGGCGGAGTTGTTAGCCTGGCGGCTCTC
 TGAGACTGTCTTGTGCCGCCAGCGGCTTCACCTTCGACGACTACGCCATGTACTGG
 GTCCGACAGGCCCCCTGGCAAAGGCCTTGAATGGGTGTCCCTGATCAGCGGAGATGG
 CGGCAGCATGTACTACGCCGATAGCGTGAAGGGCAGATTACCATCAGCCGGGACA
 ACAGCAAGAACAGCCTGTACCTGCAGATGAACTCCCTGCGGACCGAGGACACAGCC
 CTGTACTACTGCGCCAAGGATATGATCTTCTACGCCTTTTGGAGCGGCTACGGCAG
 CAGCGATTACTACTACTACGTGATGGACGTGTGGGGCCAGGGCACCACAGTGACAG
 TTTATTCTGGCGGCGGAGGATCTGGCGGAGGTGGAAGCGGAGGCGGTGGATCTGAT
 ATCCAGATGACACAGAGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGAC
 CATCACCTGTCCGGCCAGCCAGAGAATCAGCACCTACCTGAACTGGTATCAGCAGA
 AGCCCGGCAAGGCCCTAAGCTGCTGATCTATGCTGCCTCCAGTCTGCAGAGCGGC
 GTGCCAAGCAGATTTTCTGGCAGCGGCTCTGGCACCGACTTCACCTGACCATATC
 TAGCCTGCAGCCTGAGGACTTCGCCACCTACTACTGCCAGCAGAGCTACAGCACCC
 CTCCTATCACCTTTGGCCAGGGAACCAGACTGGAAATCAAAGGCGGAGAACCCAAG
 AGCGcagACAAGACCCACACCTGTCTCTCCATGTCTGCTCCAGAAGCTGCAGGCGG
 CCTTCCGTGTTTCTGTTCCTCCAAAGCCTAAGGACACCCTGATGATCAGCCGGA
 CACCTGAAGTGACCTGCGTGGTGGTGGATGTGTCCACGAGGATCCCGAAGTGAAG
 TTCAATTGGTACGTGGACGGCGTGGAAGTGACAACGCCAAGACCAAGCCTAGAGA
 GGAACAGTACAACAGCACCTACAGAGTGGTGTCTGTGCTGACAGTGCTGCACCAGG
 ACTGGCTGAACGGCAAAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCT
 CCTATCGAGAAAAACCATCAGCAAGGCCAAGGGCCAGCCTAGGGAACCCAGGTTTA
 CACCTGCTCCATGCAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGGC
 TGGTTAAGGGCTTCTACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAG
 CCAGAGAACAACATAAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTT
 CCTGTACAGCAAGCTGACCGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTTCA
 GCTGCAGCGTGATGCACGAGGCCCTGCACAACCACTACACACAGAAGTCCCTGTCT
 CTGAGCCCCGGCAAA

(配列番号187) シグナル配列 (1-57)、NYC-0006 (61-825)、リンカー (826-831)、定常領域 (832-1527)

[図189]

NYC-0012-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAASGFTFDDYAMYW
 VRQAPGKGLEWVSLISGDGGS MYADSVKGRFTISRDN SKNSLYLQMNSLRTE
 DTA LYYCAKDMIFYAFWSGYGSSDY YYYVMDVWGQTTVTVYSGGGGSGGGGSGGGGSD
 IQMTQSPSSLSASVGRVTITCRASQRISTYLNWYQQKPGKAPKLLIYAASSLQSG
 VPSRFSGSGSGTDFTLTIS SLQPEDFATYYCQQSYSTPPI TFGQGRLEIKGGEPK
 SADKTHTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVK
 FNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPA
 PIEKTIKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQ
 PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSV MHEALHNHYTQKSLS
 LSPGK

(配列番号188) シグナル配列(1-19)、NYC-0006(21-275)、リンカー(276-277)、定常領域(278-509)

[図190]

NYC-0013-HC-k

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
 TGGCGAAGTGCAGCTGGTGAATCTGGTGGCGGAGTTGTT CAGCCTGGCGGCTCTC
 TGAGACTGTCTTG TGCCGCCAGCGGCTTCACCTTCGACGATTATGCCATGCAC TGG
 GTCCGACAGGCCCTGGCAAAGGACTTGAATGGGTGTCCTGATCAGCGGCGACGG
 CGACAATACCTACTACGCCGATAGCGTGAAGGGCAGATT CACCATCAGCCGGGACA
 ACAACAAGAACAGCCTGTACCTGCAGATGAACTCCCTGCGGACCGAGGACACCGCC
 TTCTACTACTGTGCCAAAGAGCTGATCTTCGGCAAGGTGCTGCACGACTTTTACTA
 CTACGTGATGGACGTGTGGGGCCAGGGCACCACAGTGACAGTTTCTAGCGGAGGCG
 GAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGATATCCAGATGACACAG
 AGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGACCATCACCTGTAGAGC
 CAGCCAGAGCATCAGCAGCTACCTGAACTGGTATCAGCAGAAGCCCGCAAGGCC
 CTAAACTGCTGATCTATGCCGCTCCAGTCTGCAGAGCGGAGTGCCTAGCAGATTT
 TCTGGCAGCGGCTCCGGCACCGATTT CACCCTGACCATATCTAGCCTGCAGCCTGA
 GGACTTCGCCACCTACTACTGCCAGCAGAGCTACAGCACCCCTCCTATCACCTTTG
 GCCAGGGAAACCAGACTGGAAATCAAAGGCGGAGAACCAAGAGCGcaGACAAGACC
 CACACCTGTCTCCATGTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTTTCT
 GTTCCCTCCAAAGCCTAAGGACACCCCTGATGATCAGCCGGACACCTGAAGTGACCT
 GCGTGGTGGTGGATGTGTCCACGAGGATCCCGAAGTGAAGTTCAATTGGTACGTG
 GACGGCGTGGAAGTGCAACACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACAG
 CACCTACAGAGTGGTGTCTGTGCTGACAGTGCTGCACCAGGACTGGCTGAACGGCA
 AAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAAACC
 ATCAGCAAGGCCAAGGGCCAGCCTAGGGAACCC CAGGTTTACACCCTGCCTCCATG
 CAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCCTGGTTAAGGGCTTCT
 ACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAAC TAC
 AAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTTCCTGTACAGCAAGCT
 GACCGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTT CAGCTGCAGCGTGATGC
 ACGAGGCCCTGCACAACCACTACACACAGAAGTCCCTGTCTCTGAGCCCCGGCAAA

(配列番号189) シグナル配列(1-57)、NYC-0007(61-810)、リンカー(811-816)、定常領域(817-1512)

[図191]

NYC-0013-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAASGFTFDDYAMHW
VRQAPGKGLEWVSLISGDGDNITYYADSVKGRFTISRDNKNSLYLQMNSLRTEDTA
FYYCAKELIFGKVLHDFYYYVMDVWGQGTTVTVSSGGGGSGGGSGGGSDIQMTQ
SPSSLSASVGDRTTITCRASQSISSYLNWYQQKPKAPKLLIYAASSLQSGVPSRF
SGSGSGTDFTLTISLQPEDFATYYCQQSYSTPPITFGQGTRLEIKGGEPSADKT
HTCPPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV
DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT
ISKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNY
KTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMEALHNHYTQKSLSLSPGK
(配列番号190) シグナル配列 (1-19)、NYC-0007 (21-270)、リンカー (271-
272)、定常領域 (273-504)

[図192]

NYC-0014-HC-k

ATGAAGCACCTGTGGTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
TGGCGAAGTGCACTGGTGGAACTCTGGTGGCGGAGTTGTTCAACCTGGCGGCTCTC
TGAGACTGAGCTGTGAAGCCTCCGGCTTCATCTTCGACGACTACGCCATGCACTGG
GTCCGACAGGCACCTGGCAAAGGCCTTGAATGGGTGTCCCTGATCTCTGGCGACGG
CGACATCATCTACTACGCCGACTCTGTGAAGGGCAGATTACCATCAGCCGGGACA
ACAGCAAGAACAGCCTGTACCTGCAGATGAACTCCCTGATCATCGAGGACACAGCC
CTGTACTACTGCGCCAAGGATTGGGTGTTCTGGCGTCTGATGACCCACTACTGGTA
CTTCGGCCTGGATGTGTGGGGCCAGGGAACACAGTGACAGTTTCTAGCGGAGGCG
GAGGAAGTGGCGGCGGAGGATCTGGCGGTGGTGGTTCTGATATCCAGATGACACAG
AGCCCCAGCAGCCTGTCTGCCTCTGAAGGCGACAGAGTGACCATCACCTGTAGAGC
CAGCCAGAGCATCAGCACCTACCTGAACTGGTATCAGCAGAAGCCCGCAAGGCC
CTAAGCTGCTGATCTATGGTGCCTCCAGTCTGCAGAGCGGCGTGCCAAGCAGATTT
TCTGGCAGCGGCTCTGGCACCGACTTCACCCTGACCATATCTAGCCTGCAGCCTGA
GGACTTCGCCACCTACTACTGCCAGCAGTCCCTACAGCACCCCTCCTATCACATTTG
GCCAGGGCACCAAGGTGGAAATCAAAGGCGGAGAACCCAAGAGCgcaGACAAGACC
CACACCTGTCTCCTCCATGTCTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTTTCT
GTTCCCTCCAAAGCCTAAGGACACCCTGATGATCAGCCGGACACCTGAAGTGACCT
GCGTGGTGGTGGATGTGTCCACGAGGATCCCGAAGTGAAGTTCAATTGGTACGTG
GACGGCGTGGAAGTGACAAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACAG
CACCTACAGAGTGGTGTCTGTGCTGACAGTGCTGCACCAGGACTGGCTGAACGGCA
AAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAAACC
ATCAGCAAGGCCAAGGGCCAGCCTAGGGAAACCCAGGTTTACACCCCTGCCTCCATG
CAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCCTGGTTAAGGGCTTCT
ACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAACCTAC
AAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTTCCTGTACAGCAAGCT
GACCGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGC
ACGAGGCCCTGCACAACCCTACACACAGAAGTCCCTGTCTCTGAGCCCCGGCAAA
(配列番号191) シグナル配列 (1-57)、NYC-0008 (61-810)、リンカー (811-
816)、定常領域 (817-1512)

[図193]

NYC-0014-HC-k

MKHLWFFLLLVAAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCEASGFIFDDYAMHW
 VRQAPGKGLEWVSLISGDGDIIYYADSVKGRFTISRDNKNSLYLQMNSLIIEDTA
 LYYCAKDWVFGVVMTHYWFGLDVWGQGTITVTVSSGGGGSGGGGSGGGGSDIQMTQ
 SPSSLSASEGDRVTITCRASQSIISTYLNWYQQKPKAPKLLIYGASSLQSGVPSRF
 SGSGSGTDFTLTITSSLPEDFATYYCQQSYSTPPITFGQGTKVEIKGGEPEKSDKT
 HTCPCPAPEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV
 DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT
 ISKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNY
 KTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSQSVMEALHNHYTQKSLSLSPGK
 (配列番号192) シグナル配列 (1-19)、NYC-0008 (21-270)、リンカー (271-
 272)、定常領域 (273-504)

[図194]

NYC-0015-HC-k

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
 TGGCGAAGTGACAGCTGGTGGAACTCTGGTGGCGGAGTTGTTAGCCTGGCGGCTCTC
 TGAGACTGTCTTGTGCCGCCAGCGGCTTCACCTTCGACGATTATGCCATGCACTGG
 GTCCGACAGGCCCCCTGGCAAAGGACTTGAATGGGTGTCCCTGATCTCTGGCGGAGG
 CGGCGGAACCTACTACAGCATTCTGTGAAGGGCAGATTACCATCAGCCGGGACA
 CCAGCAAGGACAGCCTGTACCTGCAGATGAACAGCCTGCGGACCGAGGACACAGCC
 CTGTACTACTGCGCCAAGGACATGGTGTTCGGCGTGGTCAACCCCTACTACTACTT
 CGCCCTGGATGTGTGGGGCCAGGGCACAAAGTGACAGTCTCTTCTGGCGGCGGAG
 GAAGCGGAGGCGGAGGATCCGGTGGTGGTGGATCTGACATCCAGATGACACAGAGC
 CCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGACCATCACCTGTAGAGCCAG
 CCAGAGCATCAACAGCTACCTGAACTGGTATCAGCAGAAGCCCGGCAAGGCCCTTA
 AGCTGCTGATCTATGCTGCCTCCAGTCTGCAGAGCGGCGTGCCAAGCAGATTTTCT
 GGCAGCGGCTCTGGCACCGACTTCACCCCTGACCATATCTAGCCTGCAGCCTGAGGA
 CTTTCGCCACCTACTACTGCCAGCAGAGCTACAGCGCCCCCTCCTATCACATTTGGCC
 AGGGAACCAGACTGGAATCAAAGGCGGAGAACCCTAAGAGCGcaGACAAGACCCAC
 ACCTGTCTCTCATGTCTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTTTCTGTT
 CCCCCTCAAAGCCTAAGGACACCCTGATGATCAGCCGGACACCTGAAGTGACCTGCG
 TGGTGGTGGATGTGTCCCACGAGGATCCCGAAGTGAAGTTCAATTGGTACGTGGAC
 GGCGTGGAAGTGACAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACAGCAC
 CTACAGAGTGGTGTCTGTGCTGACAGTGTGCAACAGGACTGGCTGAACGGCAAAG
 AGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAAACCATC
 AGCAAGGCCAAGGGCCAGCCTAGGGAACCCCAGGTTTACACCCTGCCTCCATGCAG
 GGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCCTGGTTAAGGGCTTCTACC
 CCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAACCTACAAG
 ACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTTCTTCTGTACAGCAAGCTGAC
 CGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTTTCTGCTGACGCGTGATGCACG
 AGGCCCTGCACAACCACTACACACAGAAGTCCCTGTCTCTGAGCCCCGGCAAA
 (配列番号193) シグナル配列 (1-57)、NYC-0009 (61-807)、リンカー (808-
 813)、定常領域 (814-1509)

[図195]

NYC-0015-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAASGFTFDDYAMHW
VRQAPGKGLEWVSLISGGGGGTYYSDSVKGRFTISRDTSKDSLQYLMNSLRTEDTA
LYYCAKDMVFGVVTPYYYFALDVWGQGTTVTVSSGGGGSGGGSGGGSGSDIQMTQS
PSSLSASVGDRTTITCRASQSINSYLNWYQQKPKGAPKLLIYAASSLQSGVPSRFS
GSGSGTDFTLTISLQPEDFATYYCQQSYSAAPPITFGQGTREIKGGEPKSADKTH
TCPPCPAPEAAGGPSVFLFPKPKDTLMISRTPETCVVVDVSHEDPEVKFNWYVD
GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTI
SKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNYK
TTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSVSMHEALHNHYTQKSLSLSPGK
(配列番号194) シグナル配列 (1-19)、NYC-0009 (21-269)、リンカー (270-
271)、定常領域 (272-503)

[図196]

NYC-0016-HC-k

ATGAAGCACCTGTGGTTCTTTCTGCTGCTGGTGGCCGCTCCTAGATGGGTGCTGTC
TGGCGAAGTGCAGCTGGTGAATCTGGTGGCGGAGTTGTTTCAGCCTGGCGGCTCTC
TGAGACTGAGCTGTGCTGTGTCCGGCTTCACCTTCGACGACTACGCCATGCACTGG
GTCCGACAGGCACCTGGCAAAGGCCCTTGAATGGGTGTCCCTGATCAGCGGAGATGG
CGGCAGCACACACTACGCCGATTCTGTGAAGGGCAGATTACCATCAGCCGGGACA
ACAGCAAGAACAGCCTGTACCTGCAGATGAACTCCCTGCGGACAGGCGACACAGCC
CTGTACTACTGCGCCAAGGACATGATCTTCGCCGTGGTCATCACCGACTACCACTA
CTACGGCATGGACGTGTGGGGCCAGGGAACACAGTGACAGTTTCTAGCGGAGGCG
GAGGAAGTGGCGGGGAGGATCTGGCGGTGGTGGTTCTGATATCCAGATGACACAG
AGCCCCAGCAGCCTGTCTGCCTCTGTGGGAGACAGAGTGACCATCACCTGTAGAGC
CAGCCAGAGCATCAGCAGCTACCTGAACTGGTATCAGCAGAAGCCCCGCAAGGCC
CTAAACTGCTGATCTATGCCGCCTCCAGTCTGCAGAGCGGAGTGCTTAGCAGATTT
TCTGGCAGCGGCTCCGGCACCGATTTACCCCTGACCATATCTAGCCTGCAGCCTGA
GGACTTCGCCACCTACTACTGCCAGCAGAGCTACAGCACCCTCCTATCACCTTTG
GCCAGGGCACCAGACTGGAAATCAAAGGCGGAGAACCCAAGAGCgcaGACAAGACC
CACACCTGTCTCCATGTCTCTGCTCCAGAAGCTGCAGGCGGCCCTTCCGTGTTTCT
GTTCCCTCCAAAGCCTAAGGACACCCTGATGATCAGCCGGACACCTGAAGTGACCT
GCGTGGTGGTGGATGTGTCCACGAGGATCCCGAAGTGAAGTTCAATTGGTACGTG
GACGGCGTGGAAGTGACACAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACAG
CACCTACAGAGTGGTGTCTGTGCTGACAGTGCTGCACCAGGACTGGCTGAACGGCA
AAGAGTACAAGTGCAAGGTGTCCAACAAGGCCCTGCCTGCTCCTATCGAGAAAACC
ATCAGCAAGGCCAAGGGCCAGCCTAGGGAACCCAGGTTTACACCCTGCCTCCATG
CAGGGATGAGCTGACCAAGAACCAGGTGTCCCTGTGGTGCCTGGTTAAGGGCTTCT
ACCCCTCCGATATCGCCGTGGAATGGGAGAGCAATGGCCAGCCAGAGAACAACCTAC
AAGACAACCCCTCCTGTGCTGGACTCCGACGGCTCATTCTTCCCTGTACAGCAAGCT
GACCGTGGACAAGAGCAGATGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGC
ACGAGGCCCTGCACAACCACTACACACAGAAGTCCCTGTCTCTGAGCCCCGGCAAA
(配列番号195) シグナル配列 (1-57)、NYC-0010 (61-810)、リンカー (811-
816)、定常領域 (817-1512)

[図197]

NYC-0016-HC-k

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGVVQPGGSLRLSCAVSGFTFDDYAMHW
 VRQAPGKGLEWVSLISGDGGSTHYADSVKGRFTISRDNKNSLYLQMNSLRTGDTA
 LYYCAKDMIFAVVITDYHYYGMDVWGQGTTTVTVSSGGGGSGGGSGGGGSDIQMTQ
 SPSSLSASVGDRTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRF
 SSGSGSGTDFTLTISLQPEDFATYYCQQSYSTPITFGQGTRLEIKGGEPKSADKT
 HTCPCPAPAEAGGSPSVFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYV
 DGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT
 ISKAKGQPREPQVYTLPPCRDELTKNQVSLWCLVKGFYPSDIAVEWESNGQPENNY
 KTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
 (配列番号196) シグナル配列 (1-19)、NYC-0010 (21-270)、リンカー (271-
 272)、定常領域 (273-504)

[図198]

NYZ-1007-HC2

MKHLWFFLLLVAAPRWVLSGEVQLVESGGGLVQPGGSLRLSCAASGFSIRSIDIHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDESKNTLYLQMNSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTTLVTVSSGGGGSGGGSGGGGQSVLTQPPSASGT
 PGQRTVITSCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGVPDRFSGSKSG
 TSASLAISGLQSEDEADYYCGTWDSSLSAPWVFGGGTKLTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIIYPSVK
 GRFTISRENTQKTLTYLQMNSLRAEDTAVYYCTLDGRDGWVAYWGQGTTLVTVSSAST
 KGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQS
 SGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCDKTHTCPPCPAP
 EAAGGPSVFLFPPKPKDTLMISRTPEVTCVVSVSHEDPEVKFNWYVDGVEVHNAK
 TKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
 EPQVYVYPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSD
 DGSFALVSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
 (配列番号197) シグナル配列 (1-19)、NYA-2061 (21-266)、linker (267-
 271)、C3E-7085-VH (272-389)、CH1 (390-487)、Hinge (488-502)、
 CH2 (503-612)、CH3 (613-719)

[図199]

NYZ-1017-HC2

MKHLWFFLLLVAAPRWVLSGQVQLVESGGGVVQPGSLRLSCAASGFSIRSIDMHW
 VRQAPGKGLEWVATISYDGSQKYYADSVKGRFTISRDNKNTLYLQMNSSLRAEDTA
 VYHCARGSSGHYEAFDIWGQGTTLVTVSSGGGGSGGGSGGGGQSVLTQPPSVSAA
 PGQKVTISCSGSSSNIGNWYVSWYQQLPGTAPKLLIYDNNKRPSGIPDRFSGSKSG
 TSATLGITGLQTGDEADYYCGTWDSSLSAPWVFGGGTKVTVLGGGGSEVQLVESGG
 GLVQPGGSLRLSCAASGVTFNYYGMSWIRQAPGKGLEWVASITRSGGRIIYPSVK
 GRFTISRENTQKTLTYLQMNSSLRAEDTAVYYCTLDGRDGWVAYWGQGTTLVTVSSAST
 KGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQS
 SGLYSLSSVTVTPSSSLGTQTYICNVNHKPSNTKVDKRVKPKSCDKTHTCPPCPAP
 EAAGGPSVFLFPPKPKDTLMISRTPEVTCVVSVSHEDPEVKFNWYVDGVEVHNAK
 TKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
 EPQVYVYPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSD
 DGSFALVSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
 (配列番号198) シグナル配列 (1-19)、NYA-2047 (21-266)、linker (267-
 271)、C3E-7085-VH (272-389)、CH1 (390-487)、Hinge (488-502)、
 CH2 (503-612)、CH3 (613-719)