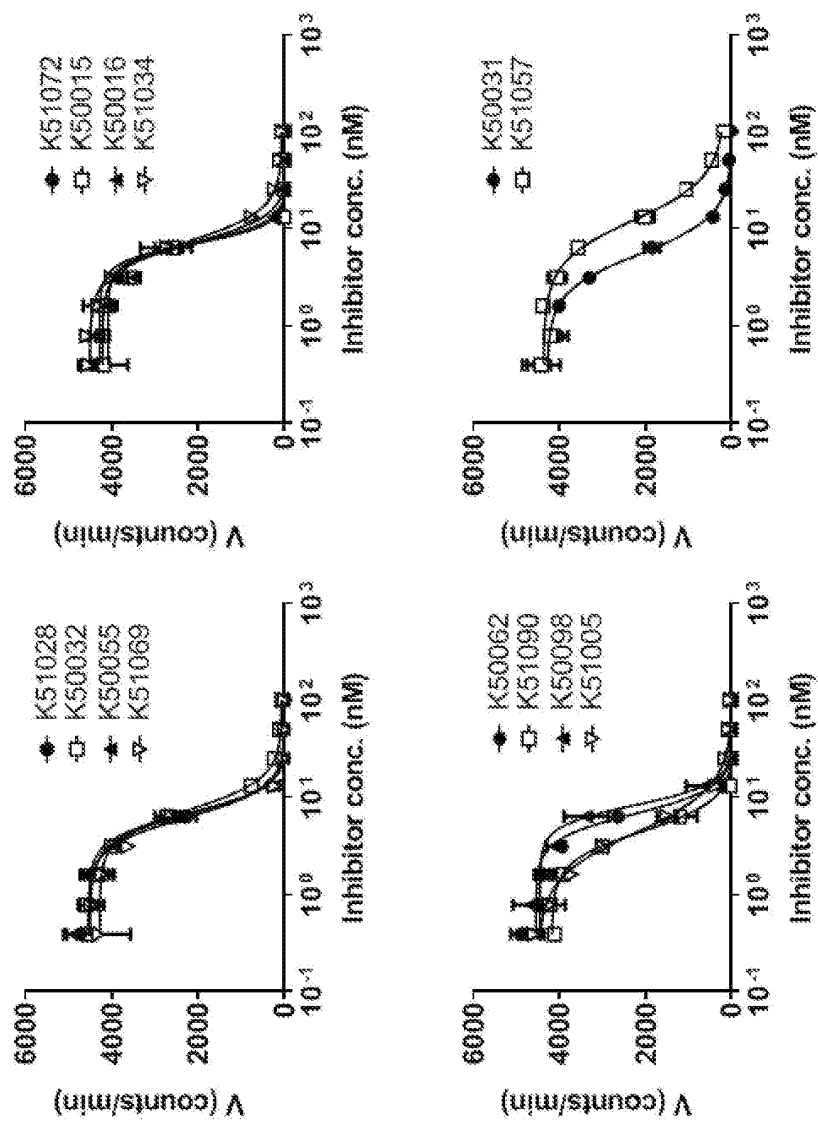


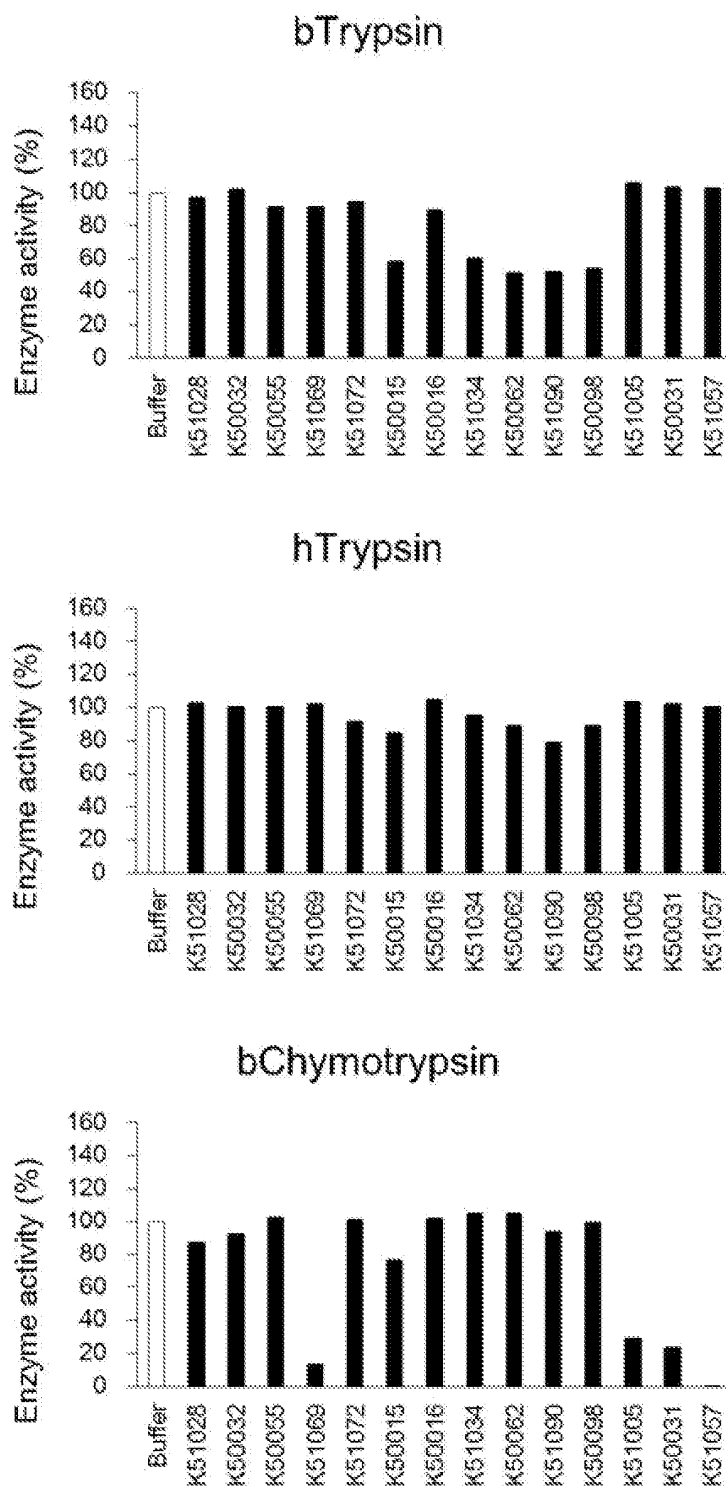
[図1]

hKLK5	1	ITNGSDCCDMHTQPMQVALLLRPNQ-LYCGAVLVHPQMLLTAAHCRRKKVFRVRLCHYSISP	59
hKLK7	1	ITIDCAPCARGSHPMQVALL-SGNQ-LHCCGVLVNERMVLITAAHCKMNEYTVHLCSDTIG-	57
hKLK14	1	ITDGEHTCTKRSSQPMQVALLAGPRRRFLCGGALLSGQVVIITAAHCGRPILQVALGKHNLR-	59
hKLK5	60	VYESGQDMFQGVKSIPIHPGVSHPGHSNDLMILIKENRRIRPTKQVVRPINVSSHCPGAGTIC	119
hKLK7	58	--DRRAQRIKASKSFRHPGVSTQTHVNDLMILVKIENSQLSSMVKKVRLLPSRCEPPGTTIC	115
hKLK14	60	RWEATQQVLRVVRQVTHPNVNSRTHDNDLMILQLQOPARIGRAVRPIEVTOACASPGTISC	119
hKLK5	120	LVSGNGTTKSPQVHFPKVLQCLNISVLSQKRCEDAVPRQIDDTTFCAGDKAGR-DSCQGD	178
hKLK7	116	TVSGNGTTTSPDVTFFSDLMGVQDVKLISPDQCTKVVKDLENSLLCAGIPDSKKNACNGD	175
hKLK14	120	RVSGNGTIISSPIARYPASLGGVNNISPDDEVQKALPRTITPGIVCAGVPQGGKDSQGD	179
hKLK5	179	SGGPVVCNGSLQGLVSMGDPYPCARPNRPGVVTNLCKFTKVITQETIQANS	227
hKLK7	176	SGGPLVCRGTILQGLVSMGTFFPCGQPNDFGVVTQVCKFTKVINDIMKKHR	224
hKLK14	180	SGGPLVCRGQLQGLVSMGMERCALPGYPGVVTNLCKYRSVIEETMRDK-	227

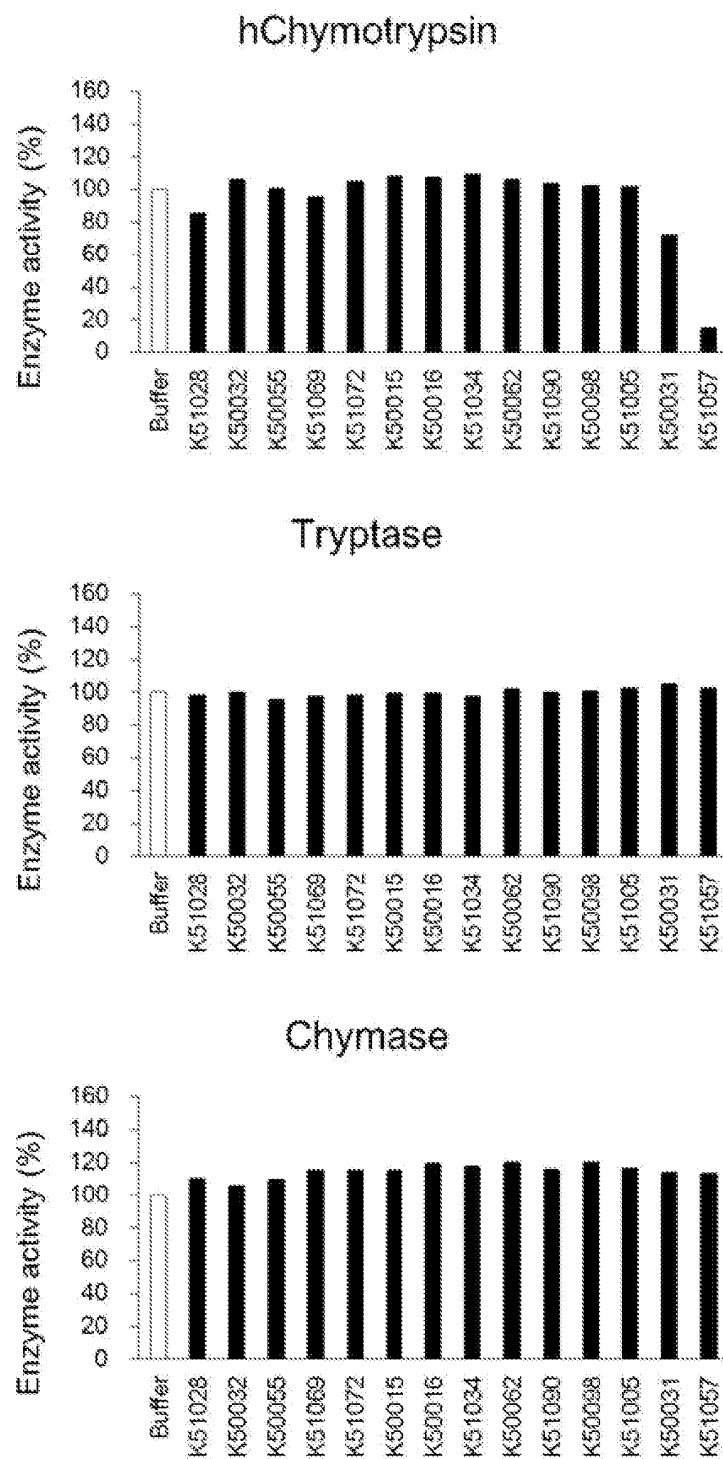
[図2]



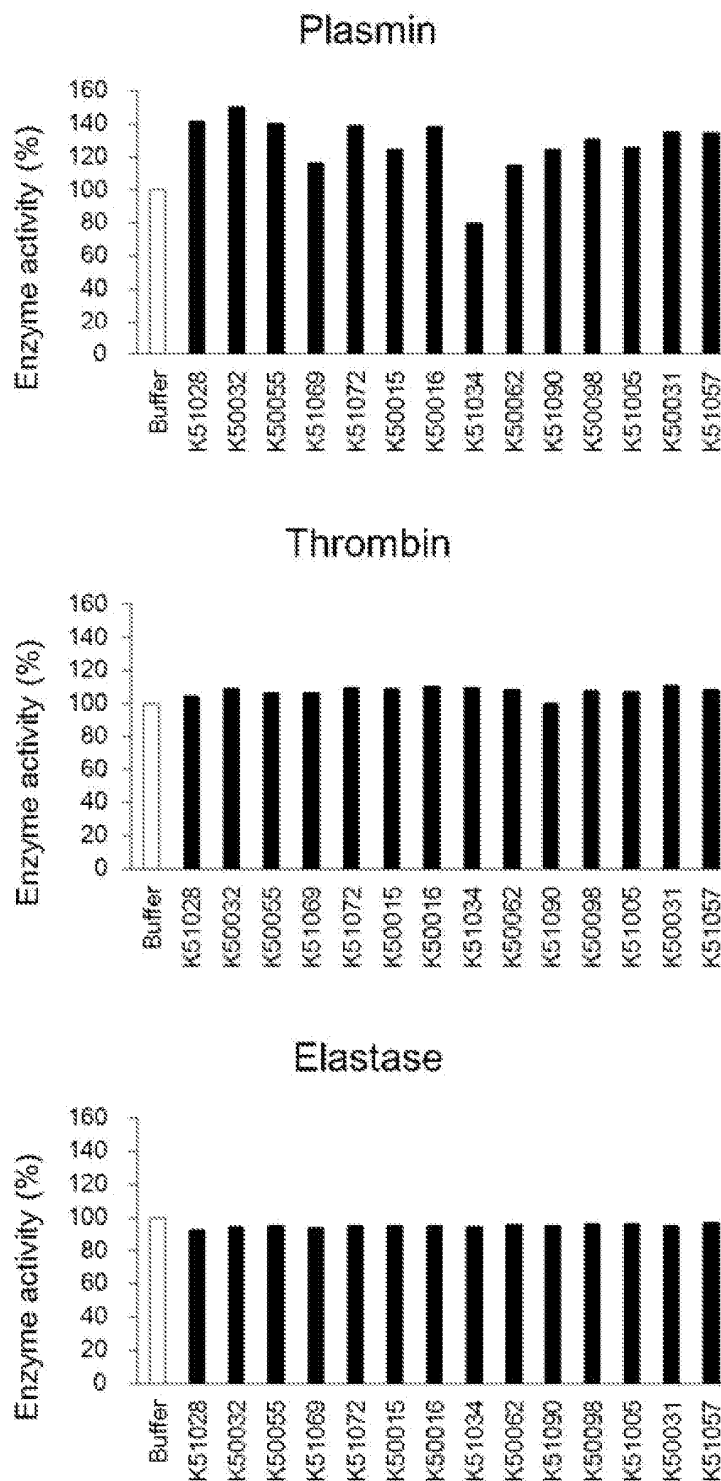
[図3(A)]



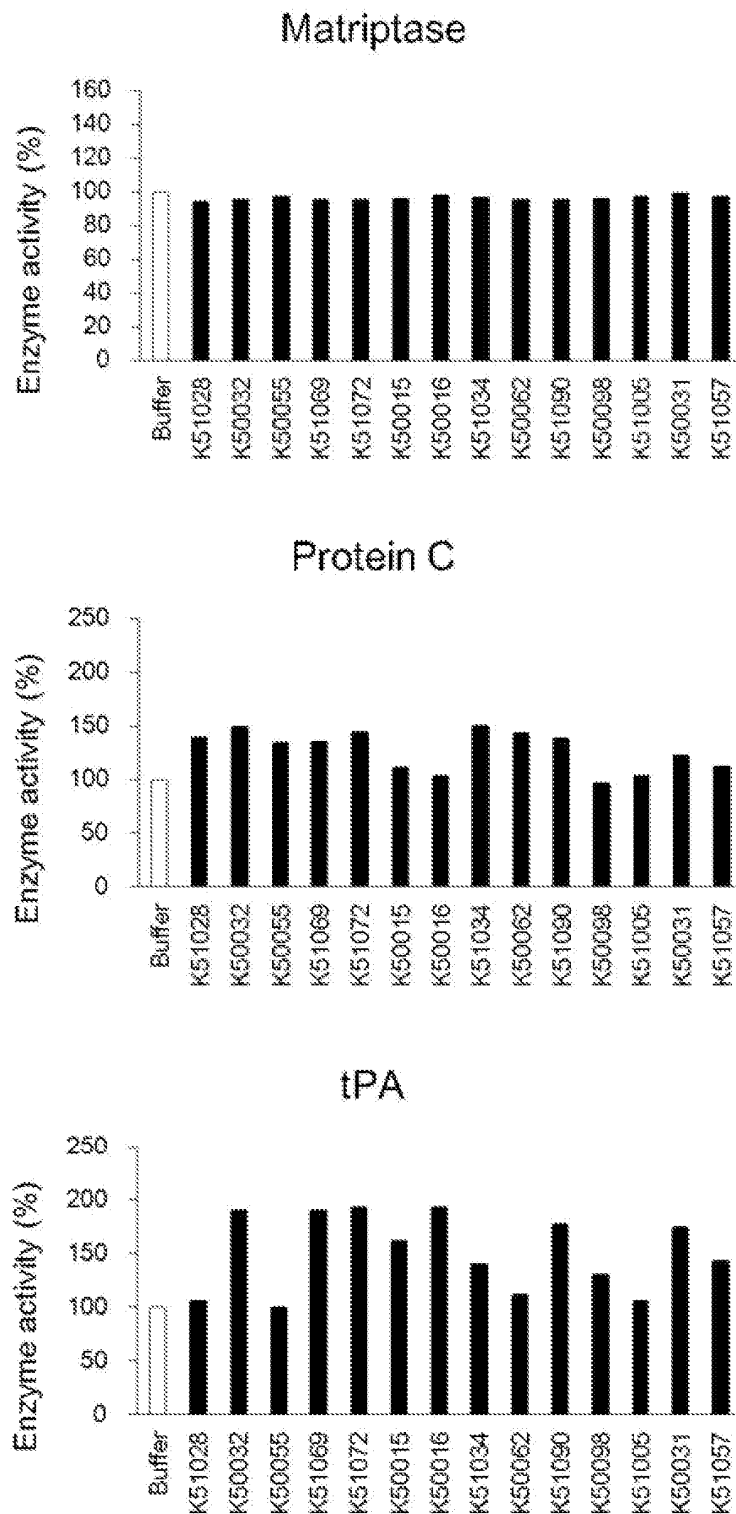
[図3(B)]



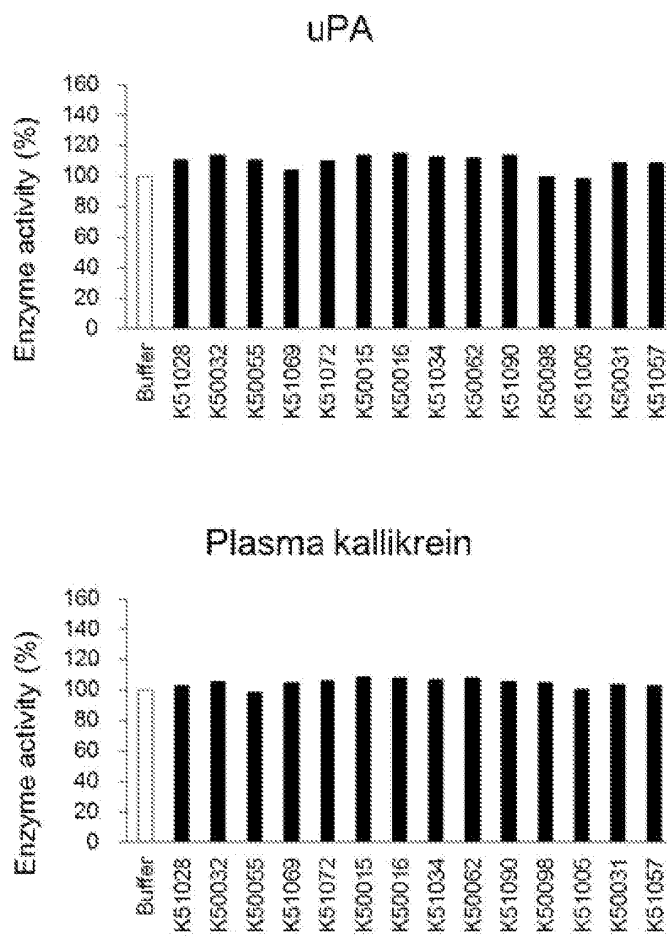
[図3(C)]



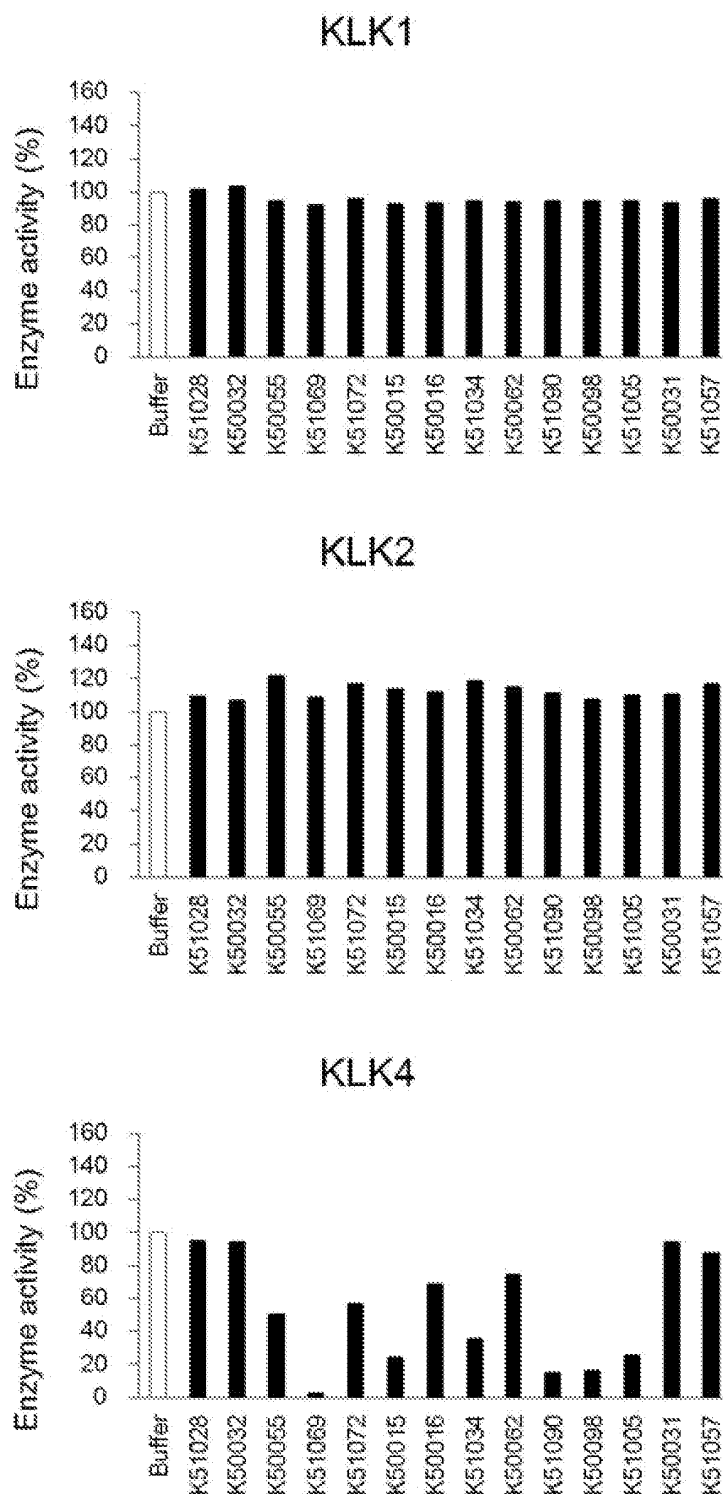
[図3(D)]



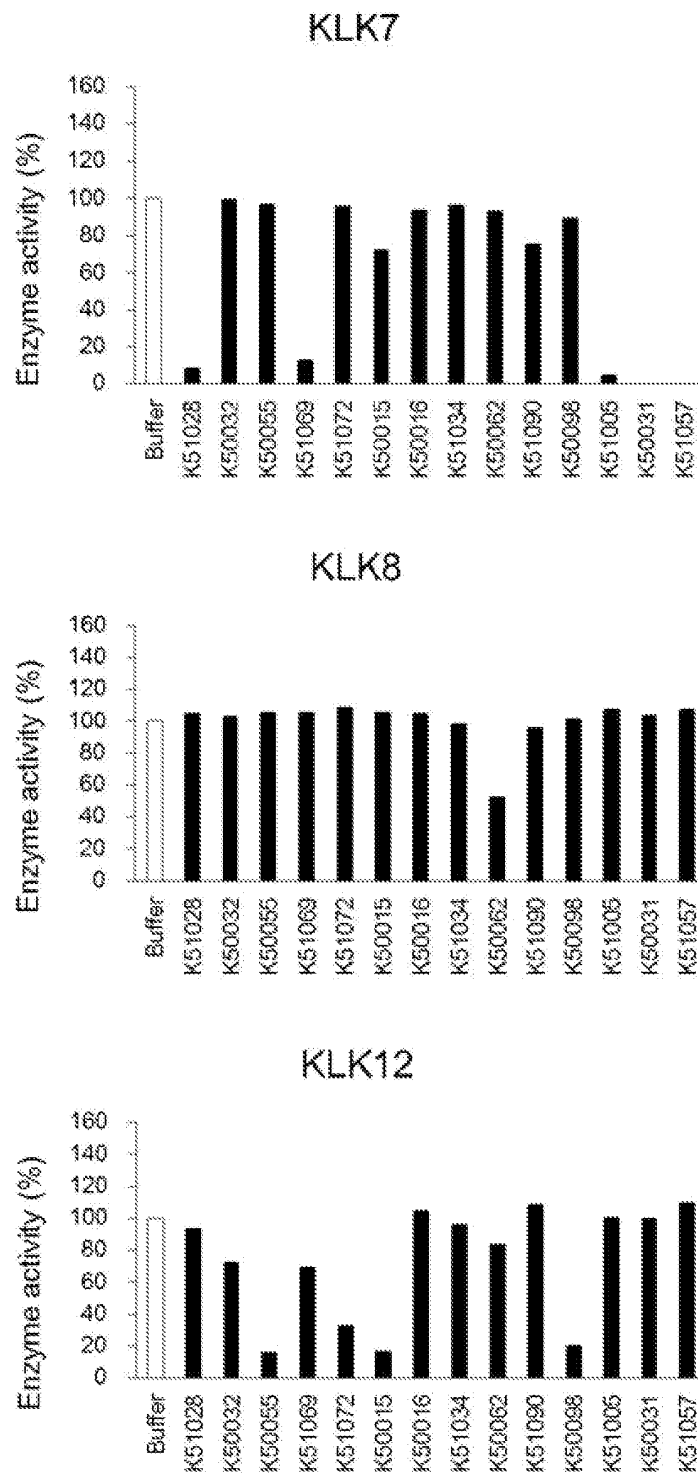
[図3(E)]



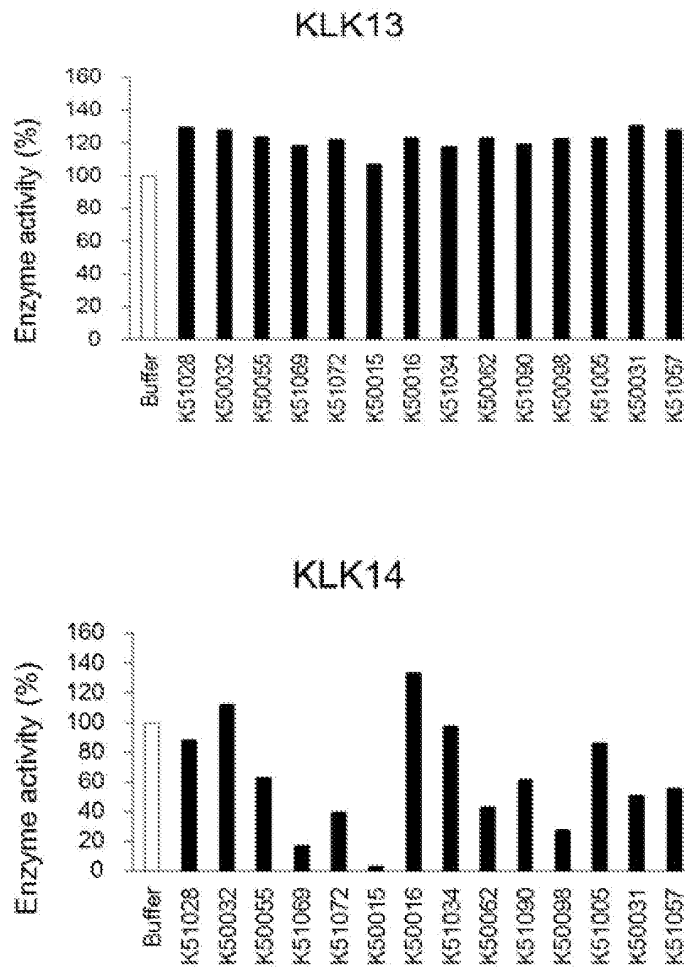
[図3(F)]



[図3(G)]



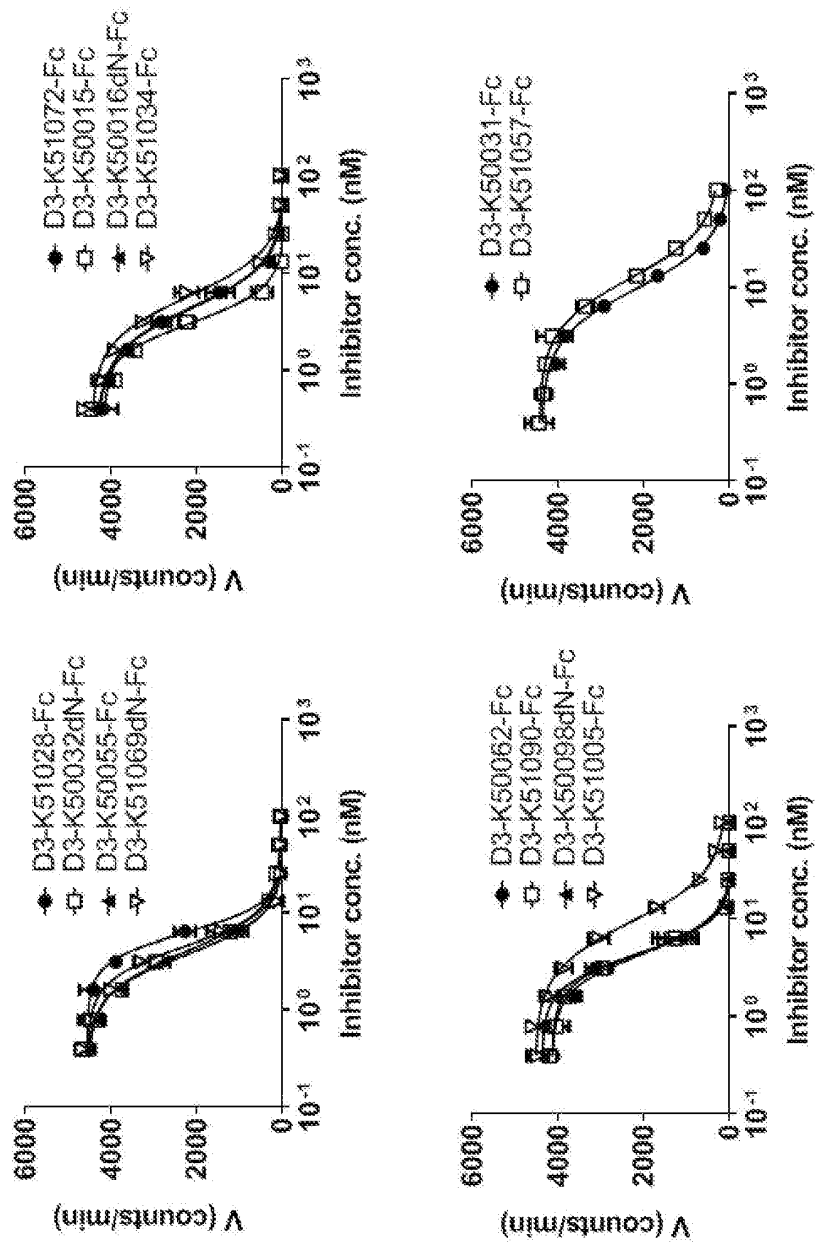
[図3(H)]



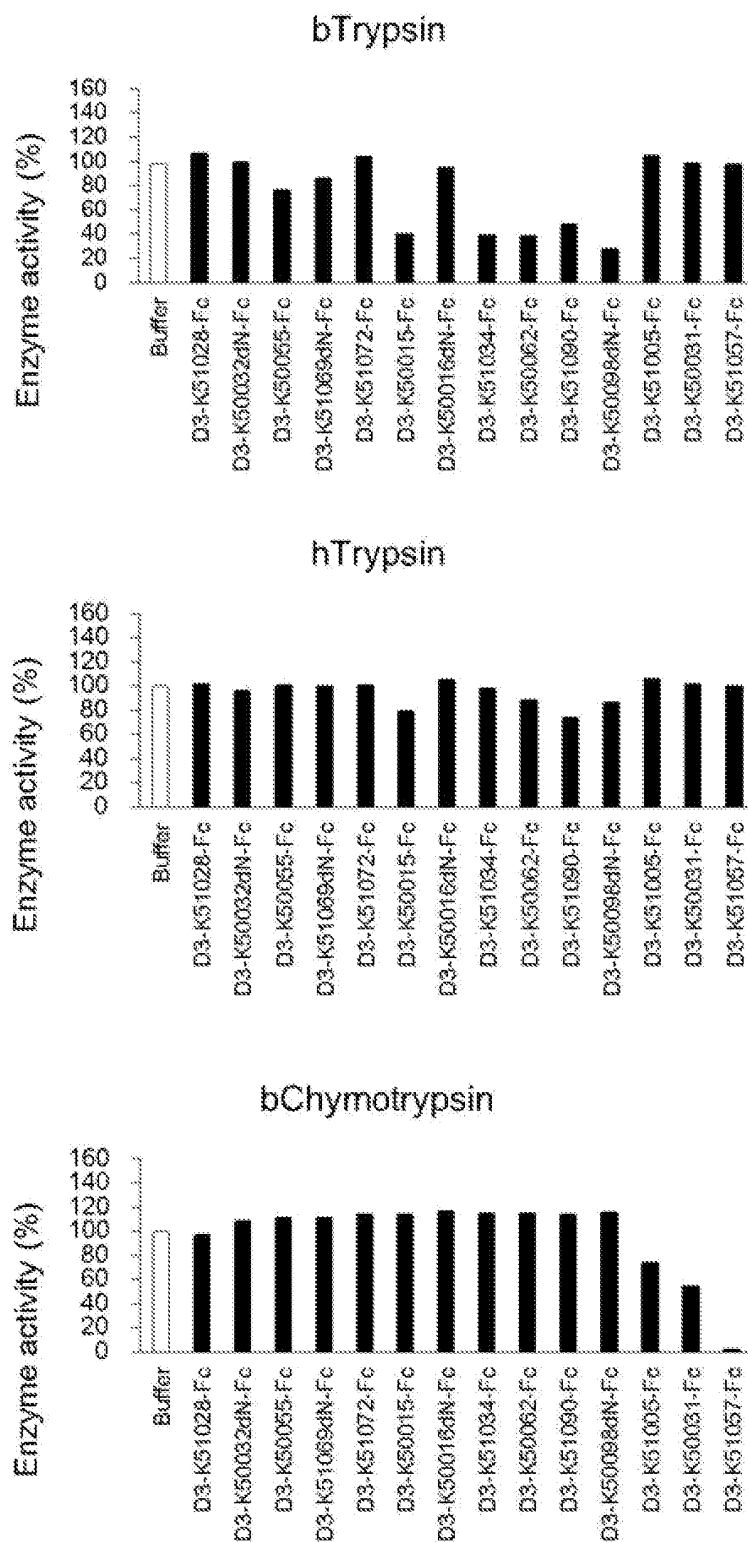
[図4]



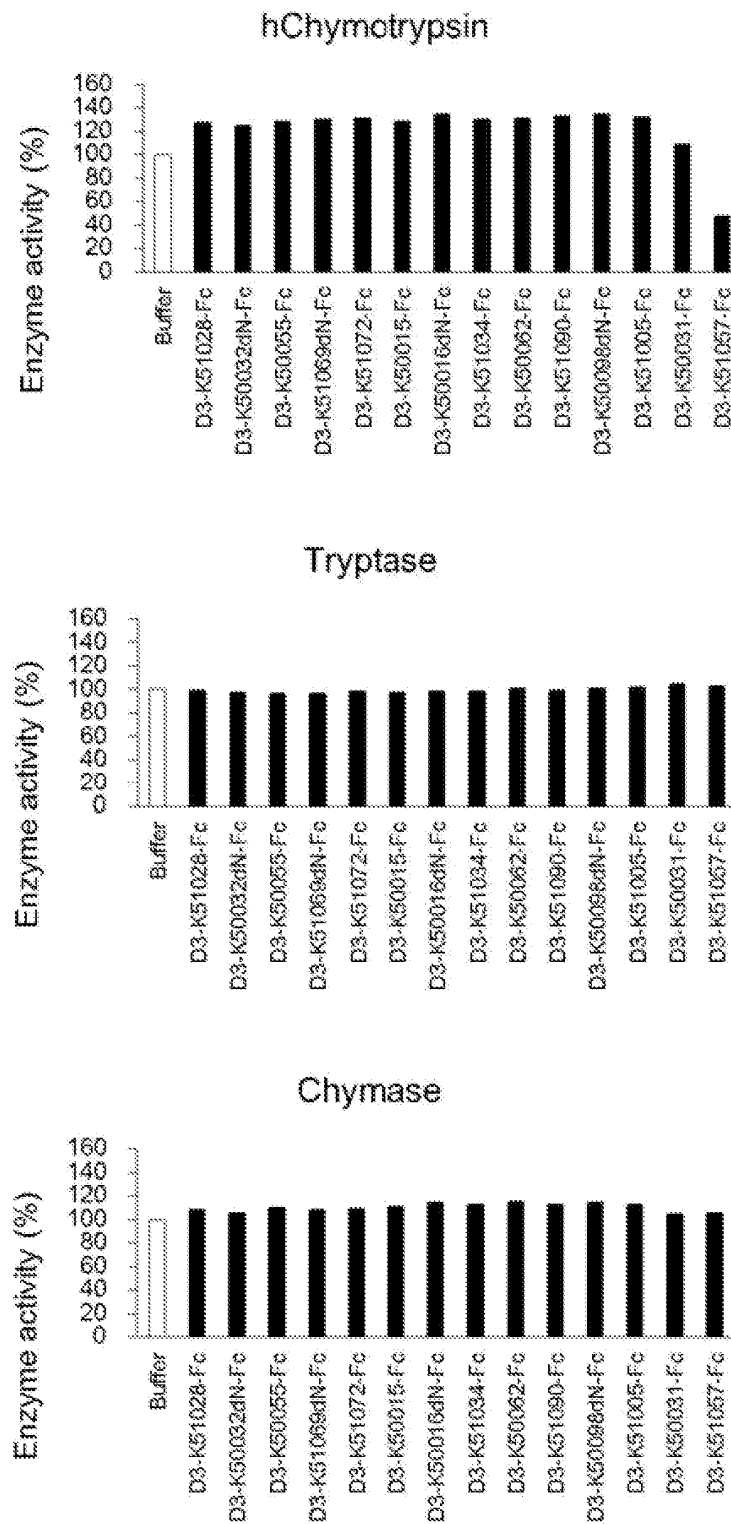
[図5]



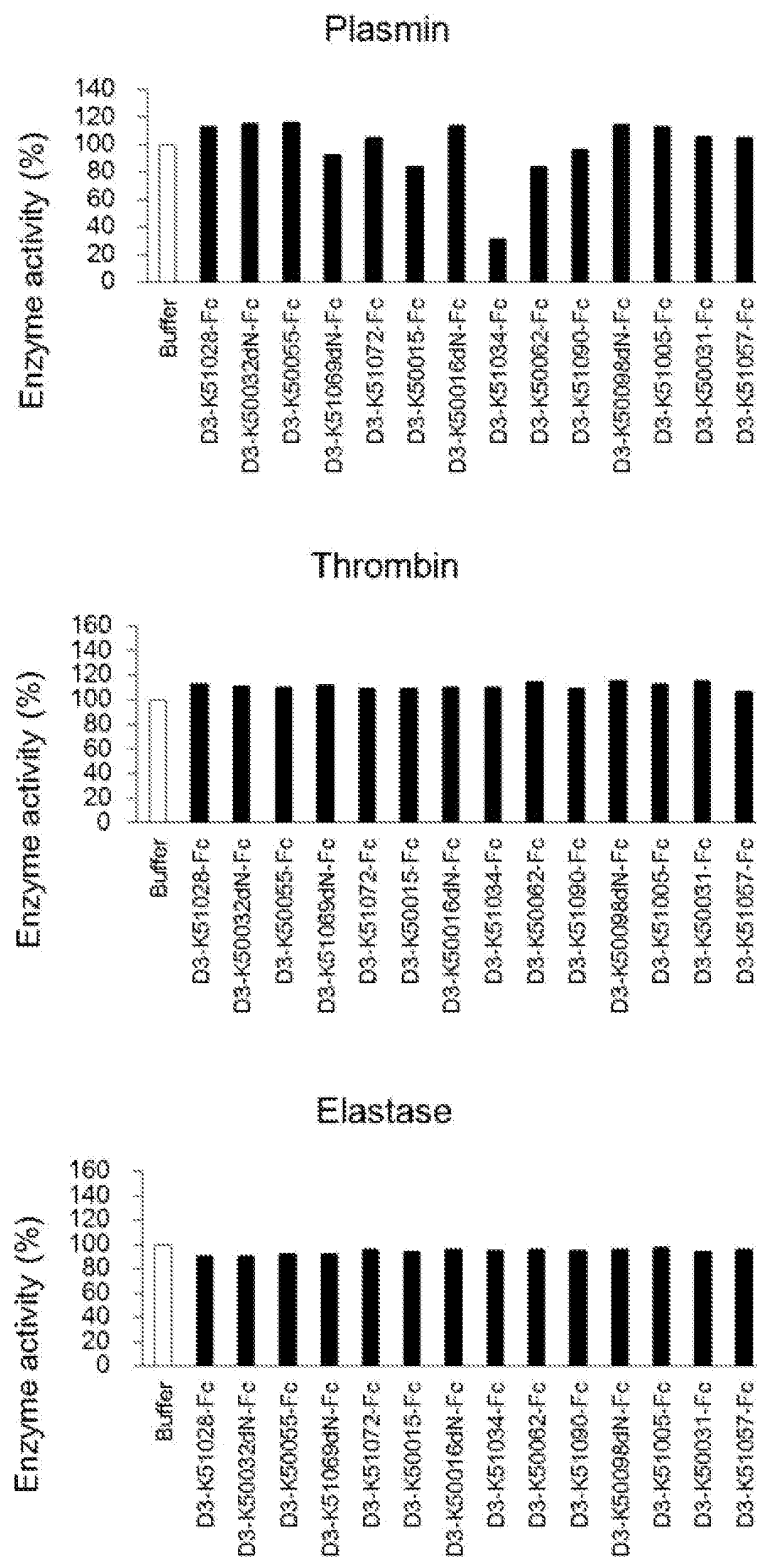
[図6(A)]



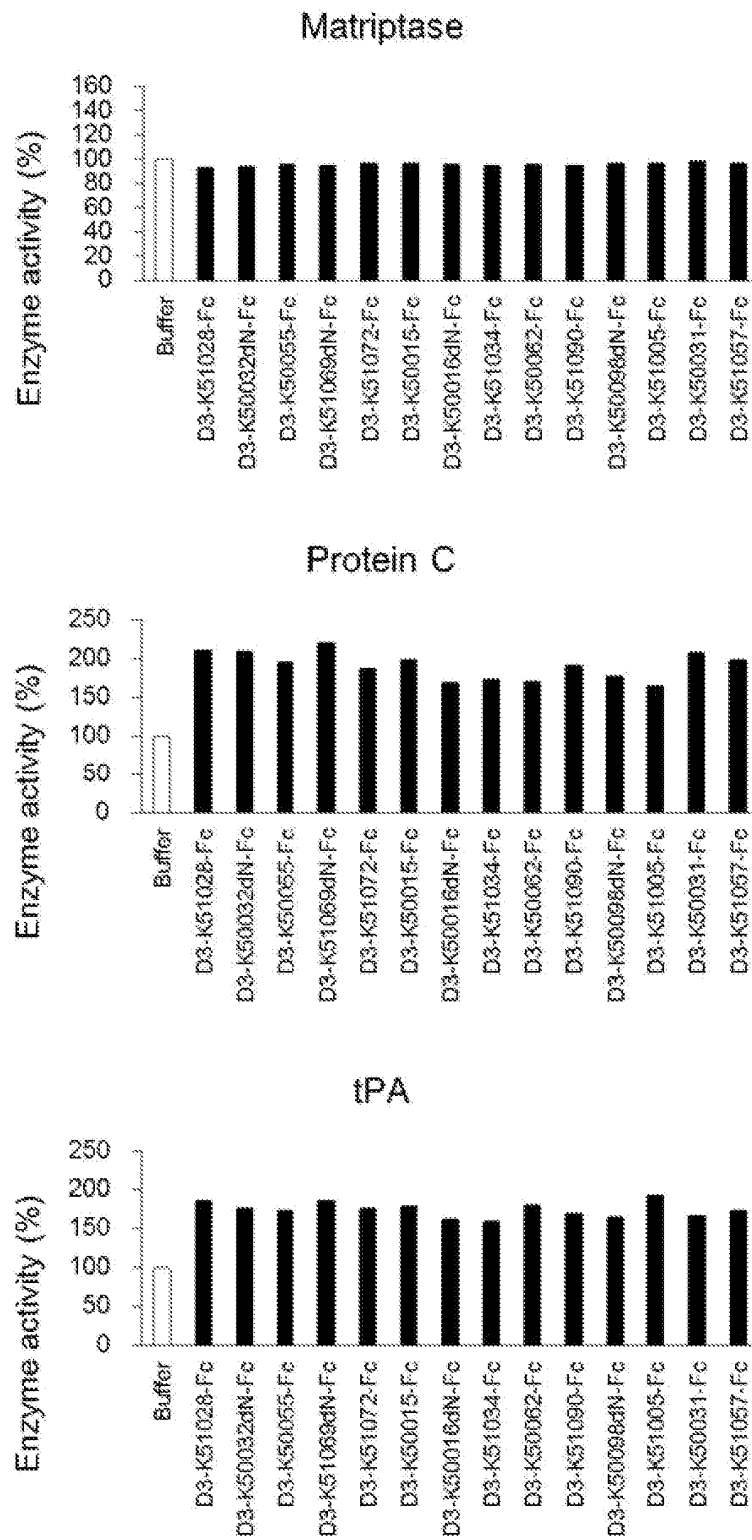
[図6(B)]



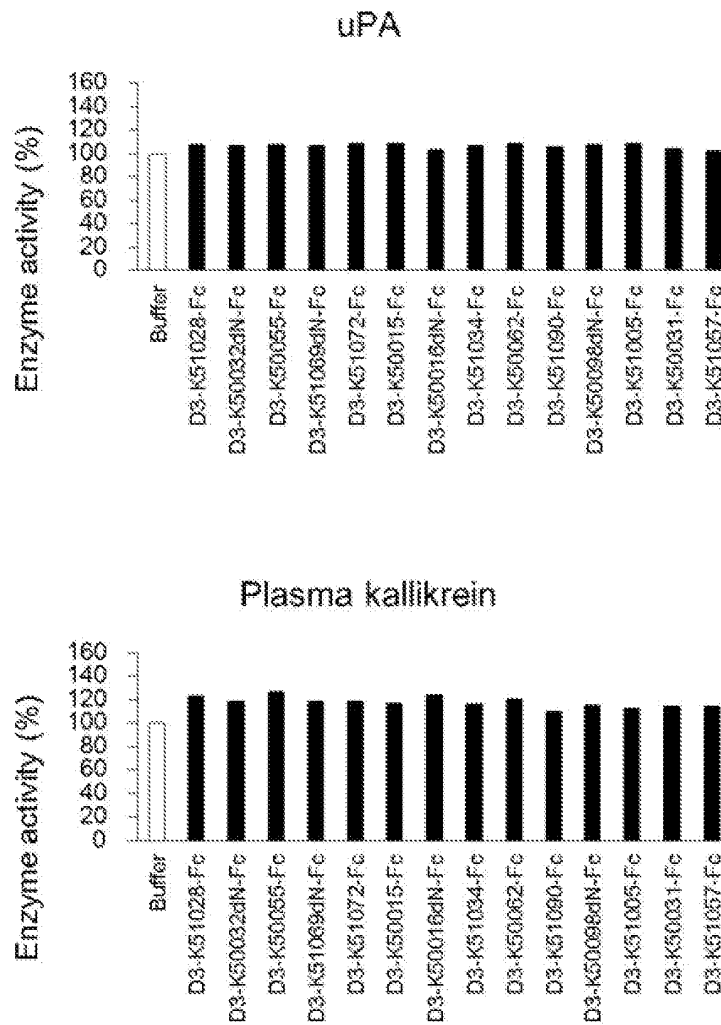
[図6(C)]



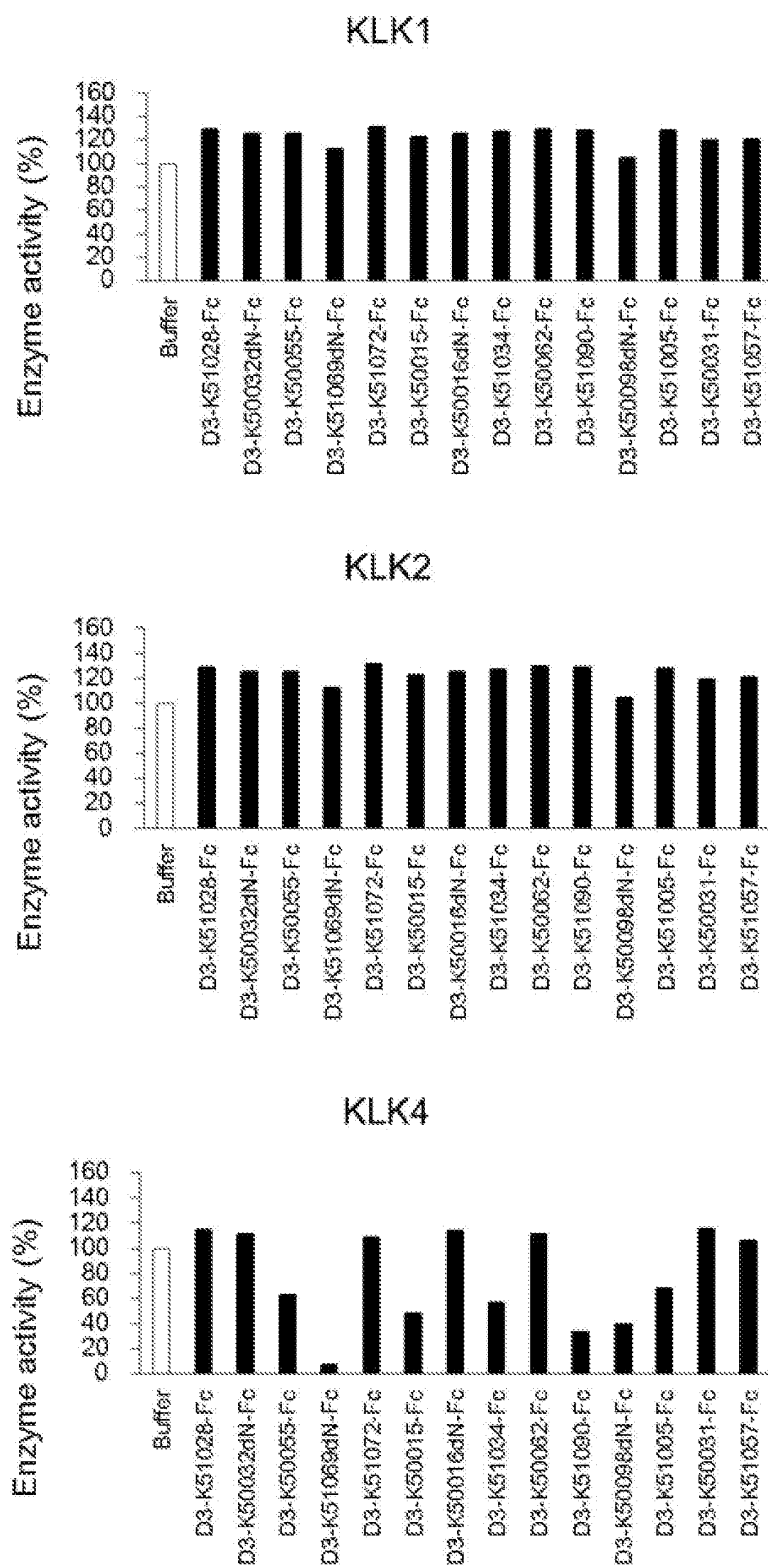
[図6(D)]



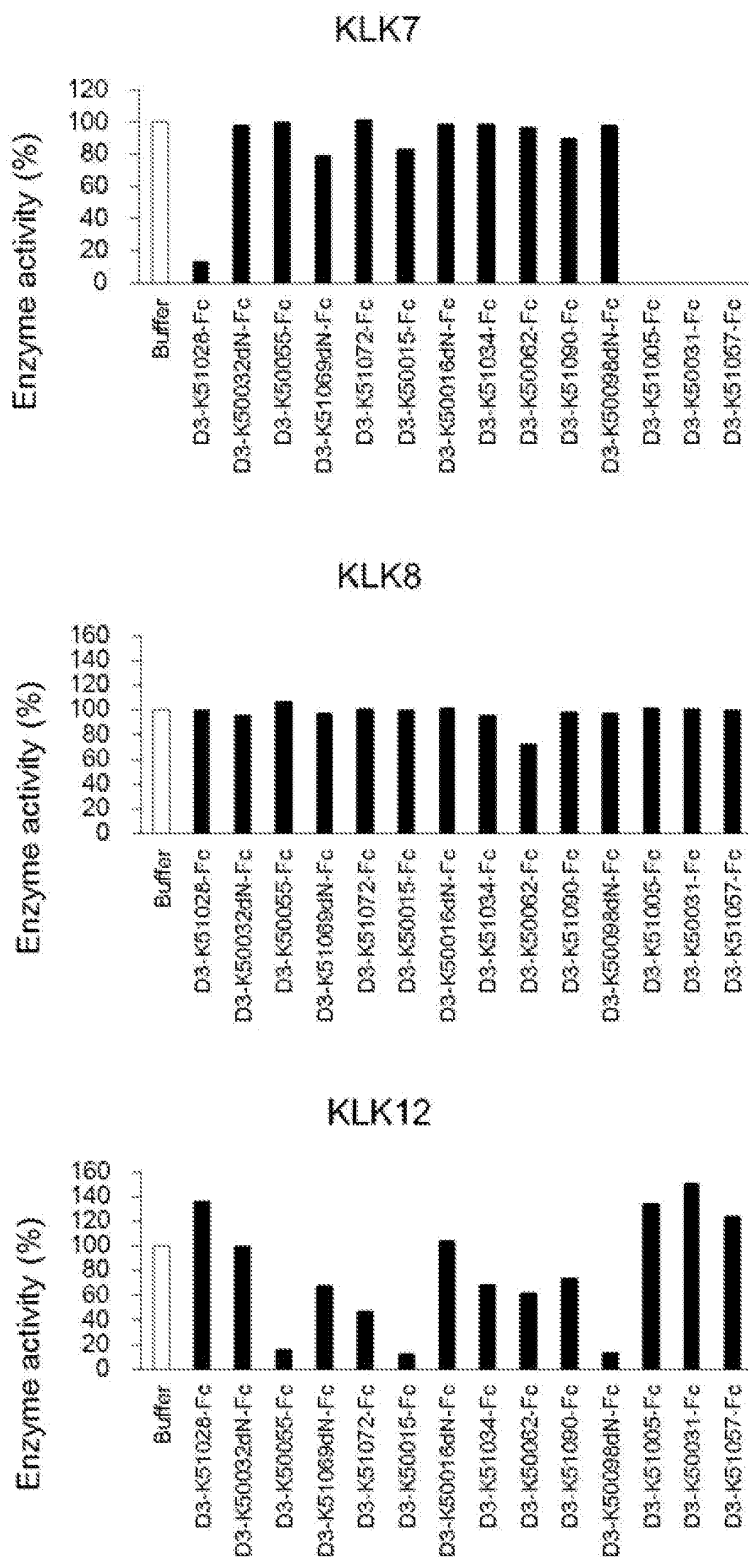
[図6(E)]



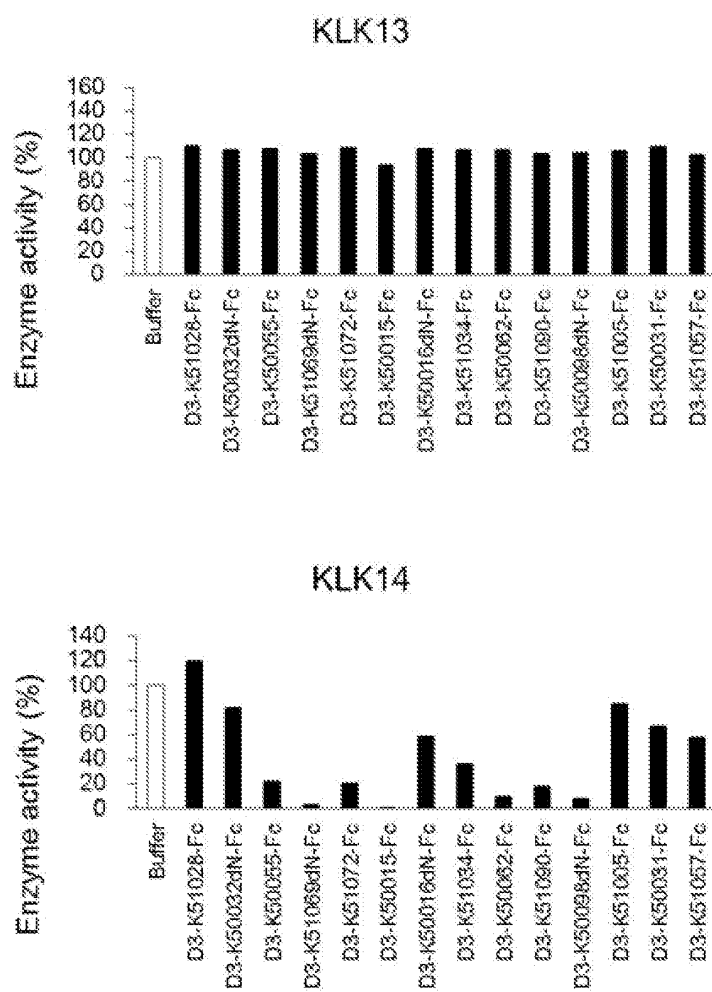
[図6(F)]



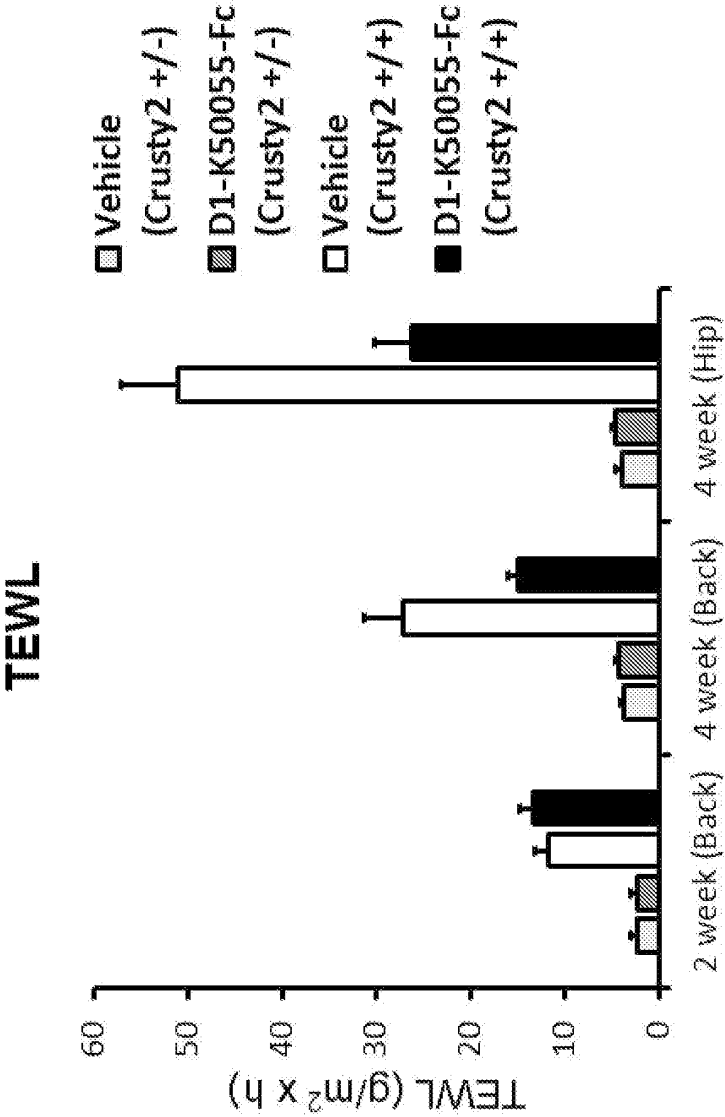
[図6(G)]



[図6(H)]



[図7]



[図8]

human SPINK2	1	PQFGLFSKYRTP-N	CSQYR--LPG----	QPRHFNVC	CSDMSTYANE	CTLC	MKIREGGHN	53
HSP5 D8_E490-G551	1	-----EAAKEI--	CSEFRDQVRNGTLI	CTREHN	PVRCPD	GKMHGK	CAMCASVFKLEE	52
HSP5 D9_E561-K622	1	-----EAVQEL--	CSEYRHYVRNGRLP	CTREND	PIEC	LDGKIHGNT	CSNCEAFFQQA	52
HSPINK9	1	--IECAKQTKQMVD	CSHYKKLPPGQQR	FCHHMYD	PICG	SDGKTYKND	CFCSKVKKTDGT	58
human SPINK2	54	IKIIRNGPC-						62
HSP5 D8_E490-G551	53	EKKNDKEEKG						62
HSP5 D9_E561-K622	53	EKEAEPRAK						62
HSPINK9	59	LKFVHFGKC-						67

【図9】

ヒトSPINK2のアミノ酸配列

DPQFGLFSKYRTPNCSQYRLPGCPRHFNPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPC (配列番号1)

【図10】

ヒトKLK5のアミノ酸配列

IINGSDCDMHTQPWQAALLLRPNQLYCGAVLVHPQWLLTA
AHCRKKVFRVRLGHYSLSPVYESGQQMFQGVKSIPHPGYS
HPGHSNDLMLIKLNRRIRPTKDVRPINVSSHCP SAGTKCL
VSGWGTTKSPQVHF PKVLQCLNISVLSQKRCEDAYPRQID
DTMFCAGDKAGRDSCQGDSGGPVVCNGSLQGLVSWG DYPC
ARPNRPGVYTNLCKFTKWIQETIQANS (配列番号2)

【図11】

ヒトKLK7のアミノ酸配列

IIDGAPCARGSHPWQVALLSGNQLHCGGVLVNERWVLTAA
HCKMNEYTVHLGSDTLGDRRAQR IKASKSFRHPGYSTQTH
VNDLMLVKLNSQARLSSMVKKVRLPSRCEPPGTTCTVSGW
GTTTSPDVTFP S DLMCVDVKLISPQDCTKVYKD LLENSML
CAGIPDSKKNACNGDSGGPLVCRGTLQGLVSWGTFPCGQP
NDPGVYTQVCKFTKWINDTMKKHR (配列番号3)

【図12】

ヒトKLK14のアミノ酸配列

IIGGHTCTRSSQPWQAALLAGPRRRFLCGGALLSGQWVIT
AAHCGRPILQVALGKHNLRRWEATQQVLRVVRQVTHPNYN
SRTHDNDLMLLQLQQPARIGRAVRPIEVTQACASPGTSCR
VSGWGTTISSPIARYPASLQCVNINISPDEV CQKAYPRTIT
PGMVCAGVPQGGKDSCQGDSGGPLVCRGQLQGLVSWG MER
CALPGYPGVYTNLCKYRSWIEETMRDK (配列番号4)

【図13】

KLK5阻害ペプチドK50032のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTCTGAACTGGACTGACCATCAGTGTGAACGTGACTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号5)

[図14]

KLK5阻害ペプチドK50032のアミノ酸配列

GPQFGLFSKYRTPNCLNWDHQCERDYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号6)**[図15]**

KLK5阻害ペプチドK50055のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTGCTAACACTATGAAACAGGACTGTACTCGTGAATA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号7)**[図16]**

KLK5阻害ペプチドK50055のアミノ酸配列

GPQFGLFSKYRTPNCANTMKQDCTREYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号8)**[図17]**

KLK5阻害ペプチドK51072のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTCAGGAAGACATGACTGAATACTGTGCTCGTGACTT
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号9)**[図18]**

KLK5阻害ペプチドK51072のアミノ酸配列

GPQFGLFSKYRTPNCQEDMTEYCARD FDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号10)**[図19]**

KLK5阻害ペプチドK50016のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTTCTCAGTGGCAGTACTCTTCTTGTGACCGTGTTTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号11)

[図20]

KLK5阻害ペプチドK50016のアミノ酸配列

GPQFGLFSKYRTPNCSQWQYSSCDRVYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号12)**[図21]**

KLK5阻害ペプチドK51034のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTGGTCGTTACACTACTGGTGGTTGTAACAAAGAATA
CGAACCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号13)**[図22]**

KLK5阻害ペプチドK51034のアミノ酸配列

GPQFGLFSKYRTPNCGRYTTGGCNKEYEPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号14)**[図23]**

KLK5阻害ペプチドK50062のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTCAGCAGTACCGTGAACCTGGGTTGTGGTCGTCAGTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号15)**[図24]**

KLK5阻害ペプチドK50062のアミノ酸配列

GPQFGLFSKYRTPNCQQYRELGCGRQYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号16)**[図25]**

KLK5阻害ペプチドK51090のヌクレオチド配列

GGCCCGCAATTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTGACGAAATCGGTAAATACGGTTGTGGTCGTTCTTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号17)

[図26]

KLK5 阻害ペプチドK51090のアミノ酸配列

GPQFGLFSKYRTPNCDEIGKYGCCRSYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号18)**[図27]**

KLK5 阻害ペプチドK50098のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTACTTCTCAGACTCTGGGTCTTGTCTCGTGAATA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号19)**[図28]**

KLK5 阻害ペプチドK50098のアミノ酸配列

GPQFGLFSKYRTPNCTSQTLGSCSREYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号20)**[図29]**

KLK5/KLK7 阻害ペプチドK51028のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTTACCAGTACCGTTCTAAAGGTTGTACTCATGAATA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号21)**[図30]**

KLK5/KLK7 阻害ペプチドK51028のアミノ酸配列

GPQFGLFSKYRTPNCYQYRSKGCTHEYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号22)**[図31]**

KLK5/KLK7 阻害ペプチドK51005のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTATGCAGCATGCTCGTCAGGGTTGTCATTACGACTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号23)

[図32]

KLK5/KLK7阻害ペプチドK51005のアミノ酸配列

GPQFGLFSKYRTPNCMQHARQGCHYDYPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号24)**[図33]**

KLK5/KLK7阻害ペプチドK50031のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTGGTGAATACAAAGGTCGTGGTTGTTACTACCATTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号25)**[図34]**

KLK5/KLK7阻害ペプチドK50031のアミノ酸配列

GPQFGLFSKYRTPNCGEYKGRGCYYHYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号26)**[図35]**

KLK5/KLK7阻害ペプチドK51057のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTGGTACTATGCAGGGTTCTGGTTGTACTTACCATTA
CGAACCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号27)**[図36]**

KLK5/KLK7阻害ペプチドK51057のアミノ酸配列

GPQFGLFSKYRTPNCGTMQSGCTYHYEPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG (配列番号28)**[図37]**

KLK5/KLK14阻害ペプチドK51069のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTTCTCAGGTTGTTGAACTTACTGTAACCGTGACTA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA (配
列番号29)

【図38】

KLK5／KLK14阻害ペプチドK51069のアミノ酸配列

GPQFGLFSKYRTPNCSQVVETYCNRDYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG（配列番号30）**【図39】**

KLK5／KLK14阻害ペプチドK50015のヌクレオチド配列

GGCCCGCAGTTTGGTCTGTTTAGCAAATATCGTACCCCGA
ATTGTTACGACACTACTACTCATTACTGTTCTCGTGAATA
CGACCCGGTTTGTGGTAGCGATATGAGCACCTATGCAAAT
GAATGTACCCTGTGCATGAAAATTCTGTGAAGGTGGCCATA
ATATTAAAATTATTTCGCAATGGTCCGTGCGGCGGCTAA（配
列番号31）**【図40】**

KLK5／KLK14阻害ペプチドK50015のアミノ酸配列

GPQFGLFSKYRTPNCYDTTTHYCSREYDPVCGSDMSTYAN
ECTLCMKIREGGHNIKIIRNGPCGG（配列番号32）

【図41】

KLK5阻害ペプチドFcコンジュゲートD3-K50032dN-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCCTGCAGTGGACTGACCATCAGTGTGA
ACGTGACTACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号33)

【図42】

KLK5阻害ペプチドFcコンジュゲートD3-K50032dN-Fcのアミノ酸配列
DDDGPQFGLFSKYRTPNCLQWTDHQCERDYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPSSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MEALHNHYTQKSLSLSPGK (配列番号34)

【図43】

KLK5阻害ペプチドFcコンジュゲートD3-K50055-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTCGGCCTGTTCAGCAAGTACA
GAACCCCTAACTGCGCTAACACTATGAAACAGGACTGTAC
TCGTGAATACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号35)

【図44】

KLK5阻害ペプチドFcコンジュゲートD3-K50055-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCANTMKQDCTREYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MH
EALHNHYTQKSLSLSPGK (配列番号36)

【図45】

KLK5阻害ペプチドFcコンジュゲートD3-K51072-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTCGGCCTGTTCAGCAAGTACA
GAACCCCTAACTGCCAGGAAGACATGACTGAATACTGTGC
TCGTGACTTCGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGACACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号37)

【図46】

KLK5阻害ペプチドFcコンジュゲートD3-K51072-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCQEDMTEYCARDPFCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVSHED
PEVKFKNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLH
QDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY
TLPSPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNHYTQKSLSLSPGK (配列番号38)

【図47】

KLK5阻害ペプチドFcコンジュゲートD3-K50016dN-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCGGCCAGTGGCAGTACTCTTCTTGTGA
CCGTGTTTACGACCCTGTGTGCGGCAGCGACATGAGCACCC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCT
CATTCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号39)

【図48】

KLK5阻害ペプチドFcコンジュゲートD3-K50016dN-Fcのアミノ酸配列
DDDGPQFGLFSKYRTPNCGQWQYSSCDRVYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPSSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MEALHNHYTQKSLSLSPGK (配列番号40)

【図49】

KLK5阻害ペプチドFcコンジュゲートD3-K51034-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTCGGCCTGTTCAGCAAGTACA
GAACCCCTAACTGCGGTCGTTACACTACTGGTGGTTGTAA
CAAAGAATACGAACCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号41)

【図50】

KLK5阻害ペプチドFcコンジュゲートD3-K51034-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCGRYTTGGCNKEYEPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMH
EALHNNHYTQKSLSLSPGK (配列番号42)

【図51】

KLK5阻害ペプチドFcコンジュゲートD3-K50062-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTCGGCCTGTTCAGCAAGTACA
GAACCCCTAACTGCCAGCAGTACCGTGAACTGGGTGTGG
TCGTACGTACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号43)

【図52】

KLK5阻害ペプチドFcコンジュゲートD3-K50062-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCQQYRELGCGRQYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MH
EALHNHYTQKSLSLSPGK (配列番号44)

【図53】

KLK5阻害ペプチドFcコンジュゲートD3-K51090-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTCGGCCTGTTCAGCAAGTACA
GAACCCCTAACTGCGACGAAATCGGTAAATACGGTTGTGG
TCGTTCTTACGACCCTGTGTGCGGCAGCGACATGAGCACCC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCCTGTGCTGGACAGCGACGGCT
CATTCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号45)

【図54】

KLK5阻害ペプチドFcコンジュゲートD3-K51090-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCDEIGKYGCGRSYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVDVDSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV MH
EALHNHYTQKSLSLSPGK (配列番号46)

【図55】

KLK5阻害ペプチドFcコンジュゲートD3-K50098dN-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCGGCTCTCAGACTCTGGGTTCCTTGTTTC
TCGTGAATACGACCCTGTGTGCGGCAGCGACATGAGCACCC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATCTTCTCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号47)

【図56】

KLK5阻害ペプチドFcコンジュゲートD3-K50098dN-Fcのアミノ酸配列
DDDGPQFGLFSKYRTPNCGSQTLLGSCSREYDPVCGSDMST
YANECTLCKMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHED
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPSSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSV
MEALHNHYTQKSLSLSPGK (配列番号48)

【図57】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K51028-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCTACCAGTACAGAAGCAAGGGCTGCAC
CCACGAGTACGATCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号49)

【図58】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K51028-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCYQYRSKGCTHEYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFKNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY
TLPSPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNHYTQKSLSLSPGK (配列番号50)

【図59】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K51005-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCATGCAGCATGCTCGTCAGGGTTGTCA
TTACGACTACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号51)

【図60】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K51005-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCMQHARQGCHYDYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFKNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY
TLPSPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNHYTQKSLSLSPGK (配列番号52)

【図61】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K50031-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCGGTGAATACAAAGGTCGTGGTTGTTA
CTACCATTTACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTTCTTCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号53)

【図62】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K50031-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCGEYKGRGCIYYHYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHED
DPEVKFKNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY
TLPSPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNHYTQKSLSLSPGK (配列番号54)

【図63】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K51057-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCGGTACTATGCAGGGTTCTGGTTGTAC
TTACCATTTACGAACCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号55)

【図64】

KLK5/KLK7阻害ペプチドFcコンジュゲートD3-K51057-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCGTMQGSCTYHYEPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHED
DPEVKFKNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPSPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNNHYTQKSLSLSPGK (配列番号56)

【図65】

KLK5/KLK14阻害ペプチドFcコンジュゲートD3-K51069dN-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCGGCCAGGTTGTTGAAACTTACTGTAA
CCGTGACTACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号57)

【図66】

KLK5/KLK14阻害ペプチドFcコンジュゲートD3-K51069dN-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCGQVVETCYCNRDYPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFKNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTIISKAKGQPREPQVY
TLPSPREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNHYTQKSLSLSPGK (配列番号58)

【図67】

KLK5/KLK14阻害ペプチドFcコンジュゲートD3-K50015-Fcのヌクレオチド配列

GATGACGACGGCCCTCAGTTTCGGCCTGTTTCAGCAAGTACA
GAACCCCTAACTGCTACGACACTACTACTCATTAAGTGTTC
TCGTGAATACGACCCTGTGTGCGGCAGCGACATGAGCACC
TACGCCAATGAGTGCACCCTGTGCATGAAGATCAGAGAAG
GCGGCCACAACATCAAGATCATCCGGAATGGCCCCCTGCGA
ACCCAAGAGCTGCGACAAGACCCACACCTGTCCCCCTTGT
CCTGCCCCCGAACTGCTGGGAGGACCTAGCGTGTTCCTGT
TCCCCCCAAAGCCCAAGGACACCCTGATGATCAGCCGGAC
CCCCGAAGTGACCTGCGTGGTGGTGGATGTGTCCCACGAG
GACCCTGAAGTGAAGTTCAATTGGTACGTGGACGGCGTGG
AAGTGCACAACGCCAAGACCAAGCCTAGAGAGGAACAGTA
CAACTCCACCTACCGGGTGGTGTCTGTGCTGACAGTGCTG
CATCAGGACTGGCTGAACGGCAAAGAGTACAAGTGCAAGG
TGTCCAACAAGGCCCTGCCTGCCCCCATCGAGAAAACCAT
CAGCAAGGCCAAGGGCCAGCCCCGCGAACCCCAAGGTGTAC
ACACTGCCCCCTAGCCGGGAAGAGATGACCAAGAACCAGG
TGTCCCTGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGA
CATTGCCGTGGAATGGGAGAGCAACGGCCAGCCCGAGAAC
AACTACAAGACCACCCCCCTGTGCTGGACAGCGACGGCT
CATTCCTTCCTGTACAGCAAGCTGACCGTGGACAAGAGCCG
GTGGCAGCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCAC
GAGGCCCTGCACAACCACTACACCCAGAAGTCCCTGAGCC
TGAGCCCCGGCAAATGA (配列番号59)

【図68】

KLK5/KLK14阻害ペプチドFcコンジュゲートD3-K50015-Fcのアミノ酸配列

DDDGPPQFGLFSKYRTPNCYDTTTHYCSREYDPVCGSDMST
YANECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPC
PAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHED
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVL
HQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVY
TLPSPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPEN
NYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNVVFSCSVMH
EALHNHYTQKSLSLSPGK (配列番号60)

[図69]

SPINK 2 変異体ペプチドの一般式

GPQFGLFSKYRTPNCX₁X₂X₃X₄X₅X₆X₇CX₈X₉X₁₀X₁₁X₁₂PVC
GSDMSTYANECTLCMKIREGGHN IKIIRNGPC (配列番号 6 1)

[図70]

プライマー 1 のヌクレオチド配列

AAAAGGATCCCTGGACAAACGTGGCCCGCAGTTTGGTCTG
TTTAG (配列番号 6 2)

[図71]

プライマー 2 のヌクレオチド配列

AAAAC TCGAGTTAGCCGCGCGCACGGACCATTTGCGAATAA
(配列番号 6 3)

[図72]

プライマー 3 のヌクレオチド配列

GGCGATTATAAAGATGACGATGATAAACACCATCACCAACC
ATC (配列番号 6 4)

[図73]

プライマー 4 のヌクレオチド配列

GTTTAAACTCAATGATGGTGGTGATGGTGTTTATCATCGT
CAT (配列番号 6 5)

[図74]

プライマー 5 のヌクレオチド配列

AAAATCTAGAGCCGCCACCATGGCCACAGCTAGACCCCT
(配列番号 6 6)

[図75]

プライマー 6 のヌクレオチド配列

CGTCATCTTTATAATCGCCGCTGTTGGCCTGGATGGTTTC
CTG (配列番号 6 7)

[図76]

プライマー 7 のヌクレオチド配列

AAAATCTAGAGCCGCCACCATGGCCAGATCTCTGCTGCTG
CCC (配列番号 6 8)

[図77]

プライマー 8 のヌクレオチド配列

CGTCATCTTTATAATCGCCCCGGTGTTTCTTCATGGTGTC
GTT (配列番号 6 9)

[図78]

プライマー 9 のヌクレオチド配列

AAAATCTAGAGCCGCCACCATGTTCTCCTCCTCACCGCC
CTC (配列番号 70)**[図79]**

プライマー 10 のヌクレオチド配列

CGTCATCTTTATAATCGCCCTTGTCGCGCATGGTCTCCTC
GAT (配列番号 71)**[図80]**

プライマー 11 のヌクレオチド配列

AAAAGTTTAAACTCAATGATGGTGGTGATGGTGT (配列番号 7
2)**[図81]**

プライマー 12 のヌクレオチド配列

AAAATCTAGAGCCGCCACCATGGGAGTGTGGCTGCTGAGC
CTG (配列番号 73)**[図82]**

プライマー 13 のヌクレオチド配列

AAAAGTTTAAACTCAATGATGGTGGTGATGGTGCCGGTGG
GTCTTCATGGTTTCCATG (配列番号 74)**[図83]**

プライマー 14 のヌクレオチド配列

AAAATCTAGAGCCGCCACCATGTTTCTGCTGCTGATCATC
CTG (配列番号 75)**[図84]**

プライマー 15 のヌクレオチド配列

AAAAGTTTAAACTCAATGATGGTGGTGATGGTGGTTGCTC
TGCATGGTCCGCTGAA (配列番号 76)**[図85]**

KLK7 基質ペプチドのアミノ酸配列

Arg-Pro-Lys-Pro-Val-Glu-Nval-Trp-Arg-Lys
(配列番号 77)**[図86]**

キモトリプシン、chymase 基質ペプチドのアミノ酸配列

Leu-Leu-Val-Tyr (配列番号 78)

[図87]

Neutrophil elastase 基質ペプチドのアミノ酸配列

Ala-Ala-Pro-Val (配列番号 79)

【図88】

Protein C基質ペプチドのアミノ酸配列

Leu-Ser-Thr-Arg (配列番号80)

【図89】

プライマー16のヌクレオチド配列

AGATGGGTGTTGTCTGATGACGACGGCCCTCAGTTCGGCC
TGTTTC (配列番号81)

【図90】

プライマー17のヌクレオチド配列

GCAGGGGCCATTCCGGAT (配列番号82)

【図91】

プライマー18のヌクレオチド配列

AAAATCTAGAGCCGCCACCATGAAGCACCTGTGGTTCTTT
CTGCTGCT (配列番号83)

【図92】

プライマー19のヌクレオチド配列

AGACAACACCCATCTAGGAGCGGCCACCAGCAGCAGAAAG
AACC (配列番号84)

【図93】

プライマー20のヌクレオチド配列

ATCCGGAATGGCCCCCTGCGAACCCAAGAGCTGCGAC (配列番
号85)

【図94】

プライマー21のヌクレオチド配列

AAAAGTTTAAACTCATTGTGCCGGGGCTCAG (配列番号86)

【図95】

ヒトIgG1Fcのアミノ酸配列

EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISR
TPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQ
YNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT
ISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPS
DIAVEWESNGQPENNYKTTTPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMEALHNHYTQKSLSLSPGK (配列番号87)

【図96】

ヒトSPINK5のD8 (E490-G551) のアミノ酸配列

EAAKEICSEFRDQVRNGTLICTREHNPVRGPDGKMHGNKC
AMCASVFKLEEEEEKKNDKEEKG (配列番号88)

【図97】

ヒトSPINK5のD9（E561—K622）のアミノ酸配列

EAVQELCSEYRHYVRNGRLPCTRENDPIEGLDGKIHGNTC
SMCEAFFQQEAKEKERAEPRAK（配列番号89）

【図98】

ヒトSPINK9のアミノ酸配列

IECAKQTKQMVDCSHYKKLPPGQQRFCHHMYDPICGSDGK
TYKNDCCFFCSKVKKTDGTLKFVHFGKC（配列番号90）

【図99】

マウスKLK5のアミノ酸配列

RIVNGSDCQKDAQPWQGALLGPNKLYCGAVLISPQWLLT
AAHCRKPVFRIRLGHHSMSPVYESGQQMFQGIKSIPHPGY
SHPGHSNDLMLIKMNRKIRDSSHVKPVEIACDCATEGTRC
MVSGWGTTSSSHNNFPKVLQCLNITVLSEERCKNSYPGQI
DKTMFCAGDEEGRDSCQGDSGGPVVCNGKLQGLVSWGDFP
CAQRNRPGVYTNLCEFVKWIKDTMNSN（配列番号91）

【図100】

マウスKLK7のアミノ酸配列

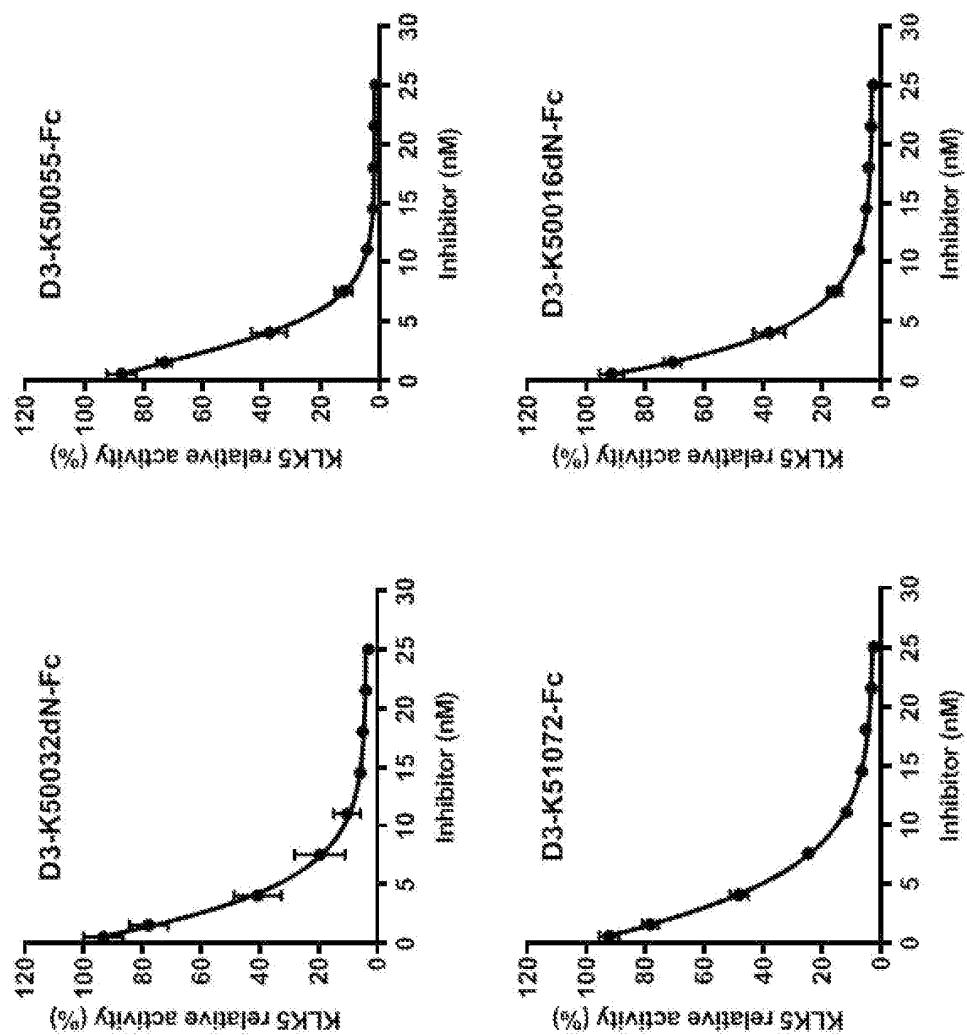
RIIDGYKCKEGSHPWQVALLKGNQLHCGGVLDKYWVLTA
AHCKMGQYQVQLGSDKIGDQSAQKIKATKSFRHPGYSTKT
HVNDIMLVRLDEPVKMSSKVEAVQLPEHCEPPGTSCTVSG
WGTTTSPDVTFPSDLMCSDVKLISRECKKVYKDLLGKTM
LCAGIPDSKTNTCNGDSGGPLVCNDTLQGLVSWGTYPCGQ
PNDPGVYTQVCKYKRWVME TMKTHR（配列番号92）

【図101】

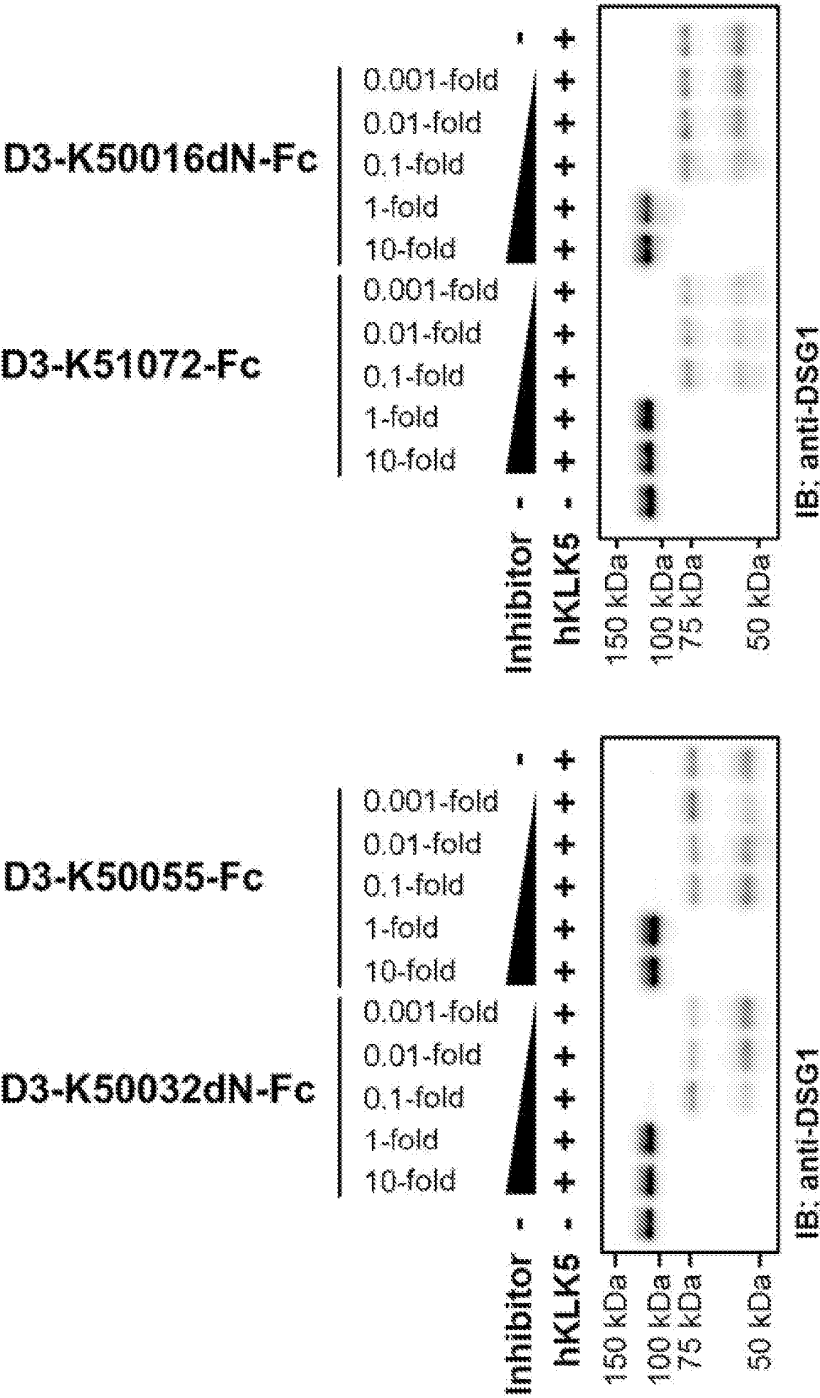
マウスKLK14のアミノ酸配列

IIGGYRCVRNSQPWQVALQAGPGHRFLCGGVLLSDQWVIT
AAHCARPILHVALGKHNI RRWEATQQVVRVARQVPHYPYQ
PQAHDNDLMLLKLQKKVRLGRAVKTISVASSCASP GTPCR
VSGWG TIASPIARYPTALQCVNVNIMSEQACHRAYPGIIT
SGMVCAGVPEGGKDSCQGDSGGPLVCGGQLQGLVSWGMER
CAMPGYPGVYANLCNYHSWIQR TMQSN（配列番号93）

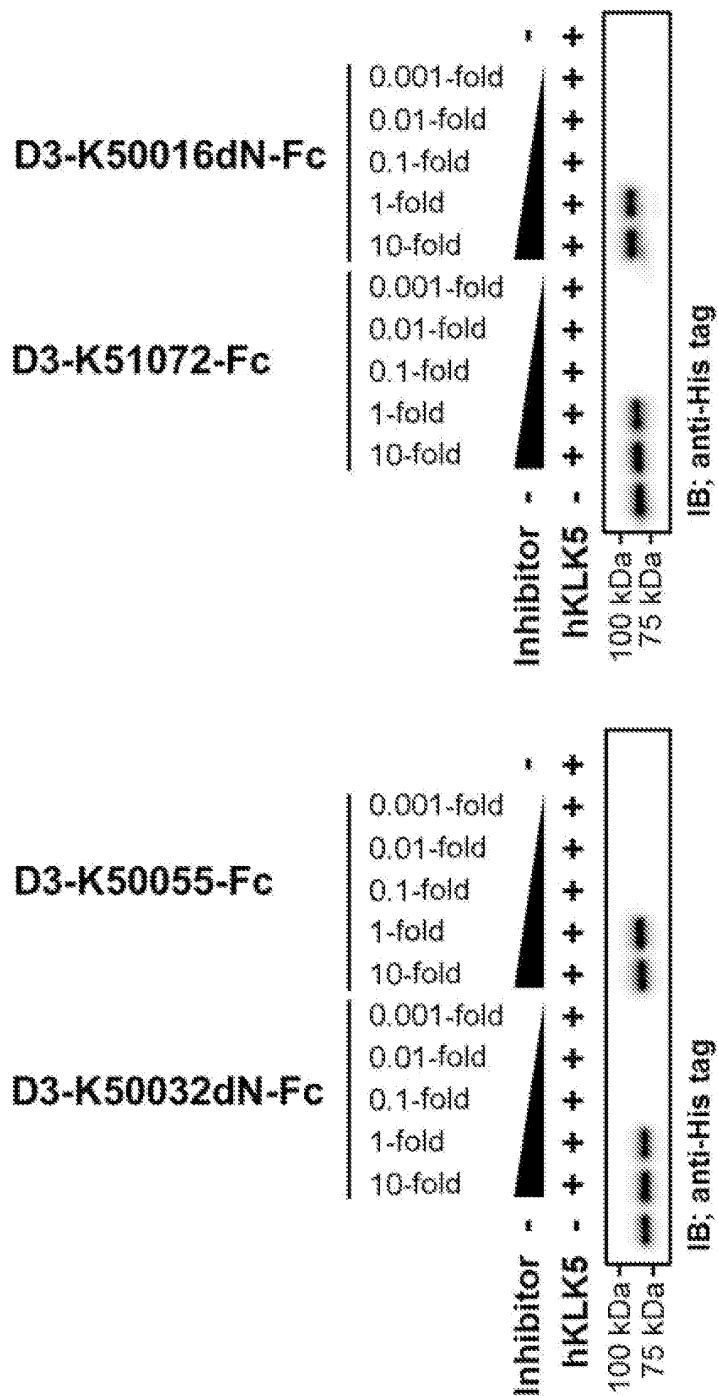
[図102]



[図103(A)]



[図103(B)]



[図104]

プライマー 2 2 のヌクレオチド配列

AGATGGGTGTTGTCTGACGGCCCTCAGTTCGGCCTGTTC

(配列番号 9 4)

【図105】

KLK5阻害ペプチドFcコンジュゲートD1-K50055-Fcのヌクレオチド配列

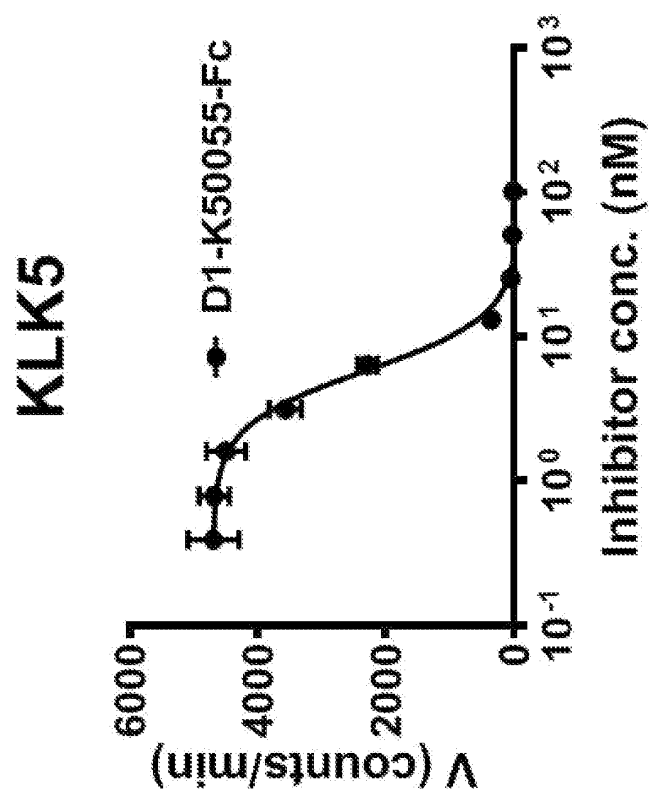
GACGGCCCTCAGTTCGGCCTGTTTCAGCAAGTACAGAACCC
CTAACTGCGCTAACACTATGAAACAGGACTGTACTCGTGA
ATACGACCCTGTGTGCGGCAGCGACATGAGCACCTACGCC
AATGAGTGCACCCTGTGCATGAAGATCAGAGAAGGCGGCC
ACAACATCAAGATCATCCGGAATGGCCCCCTGCGAACCCAA
GAGCTGCGACAAGACCCACACCTGTCCCCCTTGTCCTGCC
CCCGAACTGCTGGGAGGACCTAGCGTGTTCCCTGTTCCCC
CAAAGCCCAAGGACACCCTGATGATCAGCCGGACCCCCGA
AGTGACCTGCGTGGTGGTGGATGTGTCCCACGAGGACCCT
GAAGTGAAGTTCAATTGGTACGTGGACGGCGTGGAAGTGC
ACAACGCCAAGACCAAGCCTAGAGAGGAACAGTACAACCTC
CACCTACCGGGTGGTGTCTGTGCTGACAGTGCTGCATCAG
GACTGGCTGAACGGCAAAGAGTACAAGTGCAAGGTGTCCA
ACAAGGCCCTGCCTGCCCCCATCGAGAAAACCATCAGCAA
GGCCAAGGGCCAGCCCCGCGAACCCCAAGGTGTACACACTG
CCCCCTAGCCGGGAAGAGATGACCAAGAACCAGGTGTCCC
TGACCTGTCTCGTGAAAGGCTTCTACCCCAGCGACATTGC
CGTGGAATGGGAGAGCAACGGCCAGCCCGAGAACAACCTAC
AAGACCACCCCCCTGTGCTGGACAGCGACGGCTCATTTCT
TCCTGTACAGCAAGCTGACCGTGGACAAGAGCCGGTGGCA
GCAGGGCAACGTGTTTCAGCTGCAGCGTGATGCACGAGGCC
CTGCACAACCACTACACCCAGAAGTCCCTGAGCCTGAGCC
CCGGCAAATGA (配列番号95)

【図106】

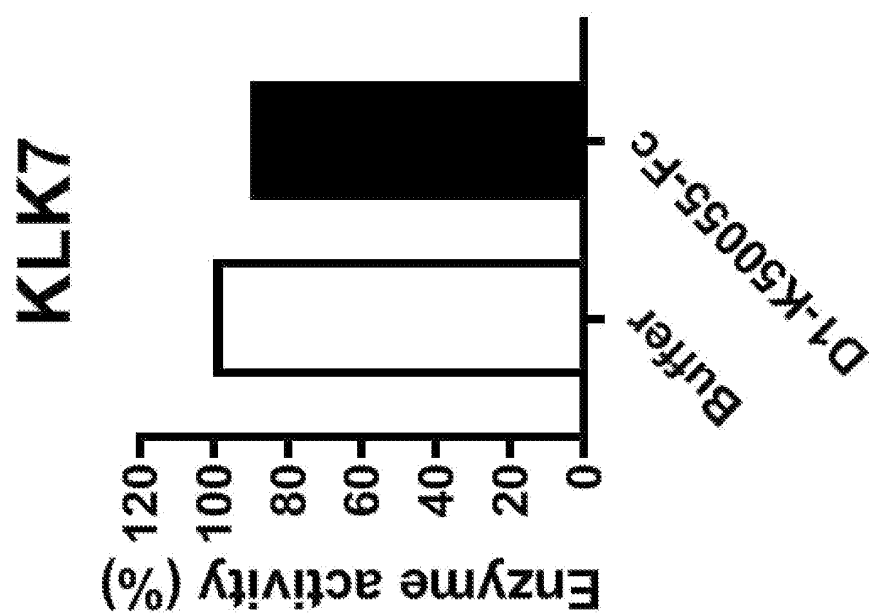
KLK5阻害ペプチドFcコンジュゲートD1-K50055-Fcのアミノ酸配列

DGPQFGLFSKYRTPNCANTMKQDCTREYDPVCGSDMSTYA
NECTLCMKIREGGHNIKIIRNGPCEPKSCDKTHTCPPCPA
PELLGGPSVFLFPKPKDTLMISRTPEVTCVVVDVSHEDP
EVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQ
DWLNGKEYKCKVSNKALPAPIEKTI SKAKGQPREPQVYTL
PPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY
KTTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEA
LHNHYTQKSLSLSPGK (配列番号96)

[図107(A)]



[図107(B)]



[図107(C)]

