

Figure 1

Numbering according to Kabat (VH)	Numbering according to Chothia (VH)	Aho numbering	IMGT
11	11	12	12
14	14	15	15
41	41	48	46
42	42	49	47
87	87	101	99
89	89	103	101
108	108	144	---
110	110	146	---
112	112	148	---
Source: http://www.bioc.uzh.ch/plueckthun/antibody/Numbering/NumFrame.html			

Figure 2

SEQ ID NO	Description	Sequence
1	Reference	EVQLVESGGGLVQPGNSLRRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNKT TLYLQMNSLRPEDTAVYYCTIGGSLRSSQGT LVTVSS
2	Reference	EVQLLESGGGLVQPGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDN SKN TLYLQMNSLRPEDTAVYYCTIGGSLRSSQGT LVTVSS
3	CDR1 (Kabat)	SFGMS
4	CDR2 (Kabat)	SISGSGSDTLYADSVKG
5	CDR3 (Kabat/Abm)	GGSLSR
6	CDR1 (Abm)	GFTFRSFGMS
7	CDR2 (Abm)	SISGSGSDTL
8	CDR3 (Kabat/Abm)	GGSLSR
9	CDR1 (Kabat)	SYAMG
10	CDR2 (Kabat)	SISRGGGYTTYADSVKG
11	CDR3 (Kabat/Abm)	ARYWATGSEYEFDY
12	CDR1 (Abm)	GLTFSSYAMG
13	CDR2 (Abm)	SISRGGGYTY
14	CDR3 (Kabat/Abm)	ARYWATGSEYEFDY
15	Invention	EVQLVESGGGLVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISR DNA ENTVYLQMNSLKPEDTAVYYCAAARYWATGSEYEFDY WGQGTLVTVSS
16	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISR DNA ENTVYLQMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
17	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISR DNA ENTVYLQMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLVKVSS

Figure 2 (continued)

SEQ ID NO	Description	Sequence
18	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNA ENTVYLMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGLTVQVSS
19	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGLLTVTVSS
20	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGLLTVTVSS
21	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGLLTVTVSS
22	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSEN NTVYLMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGLLTVTVSS
23	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGLLTVTVSS
24	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGLLTVTVSS
25	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSEN NTVYLMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGLLTVTVSS
26	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWFR QAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGLLTVTVSS

Figure 2 (continued)

SEQ ID NO	Description	Sequence
27	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISIRGGGYTTYADSVKGRFTISRDN ENTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGLTVTVSS
28	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISIRGGGYTTYADSVKGRFTISRDNSEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGLTVTVSS
29	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVISIRGGGYTTYADSVKGRFTISRDNSEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGLTVTVSS
30	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISIRGGGYTTYADSVKGRFTISRDNSEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGLTVTVSS
31	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISIRGGGYTTYADSVKGRFTISRDNSEN NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGLTVTVSS
32	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVISIRGGGYTTYADSVKGRFTISRDNSEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGLTVTVSS
33	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVISIRGGGYTTYADSVKGRFTISRDNSEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGLTVTVSS
34	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISIRGGGYTTYADSVKGRFTISRDNSEN NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGLTVTVSS
35	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVISIRGGGYTTYADSVKGRFTISRDNSEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGLTVTVSS

Figure 2 (continued)

SEQ ID NO	Description	Sequence
36	Invention	EVQLVESGGGLVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDN ENTVYLMNSLKPEDTAVYYCAAARYWATGSEYEFDY WGQGTLLTVSSA
37	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDN ENTVYLMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLLTVSSA
38	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDN ENTVYLMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLLVKVSS-A
39	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDN ENTVYLMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLLVQVSS-A
40	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGTLLTVSSA
41	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGTLLTVSSA
42	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGTLLTVSSA
43	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDNSEN NTVYLMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLLTVSSA
44	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSEN TVYLMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGTLLTVSSA

Figure 2 (continued)

SEQ ID NO	Description	Sequence
45	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDN SKN TVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
46	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKERERVASISRGGGYTTYADSVKGRFTISRDN SK NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSSA
47	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKEREFVASISRGGGYTTYADSVKGRFTISRDN SKN TVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
48	Invention	EVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN A ENTVYLQMNSLKPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSSA
49	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN SEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
50	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDN SEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
51	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKERERVASISRGGGYTTYADSVKGRFTISRDN SEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
52	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN SK NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSSA
53	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKEREFVASISRGGGYTTYADSVKGRFTISRDN SEN TVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGTLVTVSSA

Figure 2 (continued)

SEQ ID NO	Description	Sequence
54	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDN SKN TVY LQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
55	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKERERVASISRGGGYTTYADSVKGRFTISRDN SK NTVY LQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSSA
56	Invention	EVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWR QAPGKEREFVASISRGGGYTTYADSVKGRFTISRDN SKN TVY LQMNSLRPEDTATYYCAAARYWATGSEYEFDYW GQGTLVTVSSA
57	Invention	DVQLVESGGGLVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN A ENTVY LQMNSLKPEDTAVYYCAAARYWATGSEYEFDY WGQGTLVTVSS
58	Invention	DVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN A ENTVY LQMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
59	Invention	DVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN A ENTVY LQMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLVKVSS
60	Invention	DVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN A ENTVY LQMNSLKPEDTALYYCAAARYWATGSEYEFDY WGQGTLVQVSS
61	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDN SE NTVY LQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
62	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDN SE NTVY LQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS

Figure 2 (continued)

SEQ ID NO	Description	Sequence
63	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
64	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSE KNTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
65	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
66	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
67	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSE KNTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
68	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSS
69	Invention	DVQLVESGGGVVQAGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSE ENTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
70	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
71	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS

Figure 2 (continued)

SEQ ID NO	Description	Sequence
72	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
73	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSE KNTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
74	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
75	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVVSISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
76	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVASISRGGGYTTYADSVKGRFTISRDNSE KNTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
77	Invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKEREFVASISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTATYYCAAARYWATGSEYEFDY WGQGTLVTVSS
78	C-terminal sequence	VTVSS
79	Reference	EVQLVESGGGVVQPGNSLRLSCAASGFTFSSFGMSWVR QAPGKGLEWVSSISGSGSDTLYADSVKGRFTISRDNSE TLYLQMNSLRPEDTALYYCTIGGSLRSSQGTLVTVSS
80	Reference	EVQLVESGGGVVQPGGSLRLSCAASGFTFRSFGMSWVR QAPGKGPEWVSSISGSGSDTLYADSVKGRFTISRDNSE TLYLQMNSLRPEDTALYYCTIGGSLRSSQGTLVTVSS
81	anti-HER2-Nanobody	EVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNSE VYLQMNSLRPEDTAVYYCKRFRRTAAQGTDYWGQGT LTVSS

Figure 2 (continued)

SEQ ID NO	Description	Sequence
82	Compound of the invention	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGTL VTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGSEVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMG WFRQAPGKERERVVSISRGGGYTTYADSVKGRFTISR NSENTVYLQMNSLRPEDTALYYCAAARYWATGSEYEF DYWGQGTLVTVSSA
83	Compound of the invention	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGTL VTVSSGGGGSGGGGSGGGGSEVQLVESGGGVVQPGGS LRLSCAASGLTFSSYAMGWFRQAPGKERERVVSIRGG GYTTYADSVKGRFTISRDNSENTVYLQMNSLRPEDTAL YYCAAARYWATGSEYEFDYWGQGTLVTVSSA
84	Compound of the invention	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGTL VTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGSEVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMG WFRQAPGKERERVVSISRGGGYTTYADSVKGRFTISR NSENTVYLQMNSLRPEDTALYYCAAARYWATGSEYEF DYWGQGTLVTVSSA
85	Compound of the invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVSISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGGSGGGGSEVQLVESGGGLVQAGGSLRLSCAASGIT FSINTMGWYRQAPGKQRELVALISSIGDTYYADSVKGR FTISRDNKNTVYLQMNSLKPEDTAVYYCKRFRTAAQG TDYWGQGTLVTVSSA

Figure 2 (continued)

SEQ ID NO	Description	Sequence
86	Compound of the invention	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGTL VTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGSEVQLVESGGGLVQAGGSLRLSCAASGITFSINTMG WYRQAPGKQRELVALISSIGDTYYADSVKGRFTISRDN AKNTVYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWG QGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGG GSGGGGSEVQLVESGGGVVQPGGSLRLSCAASGLTFSS YAMGWFRQAPGKERERVVISRGGGYTTYADSVKGRF TISRDNSENTVYLQMNSLRPEDTALYYCAAARYWATGS EYEFDYWGQGTLVTVSSA
87	Compound of the invention	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGTL VTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGSEVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMG WFRQAPGKERERVVISRGGGYTTYADSVKGRFTISRDN SENTVYLQMNSLRPEDTALYYCAAARYWATGSEYEF DYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGG GSGGGGSGGGGSEVQLVESGGGLVQAGGSLRLSCAAS GITFSINTMGWYRQAPGKQRELVALISSIGDTYYADSVK GRFTISRDNKNTVYLQMNSLKPEDTAVYYCKRFRTAA QGTDYWGQGTLVTVSSA
88	Compound of the invention	DVQLVESGGGVVQPGGSLRLSCAASGLTFSSYAMGWF RQAPGKERERVVISRGGGYTTYADSVKGRFTISRDNSE NTVYLQMNSLRPEDTALYYCAAARYWATGSEYEFDY WGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGGGSGGGGSEVQLVESGGGLVQAGGSLRLSCAASGIT FSINTMGWYRQAPGKQRELVALISSIGDTYYADSVKGR FTISRDNKNTVYLQMNSLKPEDTAVYYCKRFRTAAQG TDYWGQGTLVTVSSGGGGSGGGGSGGGGSGGGGSGGG GGSGGGGSGGGGSEVQLVESGGGLVQAGGSLRLSCAA SGITFSINTMGWYRQAPGKQRELVALISSIGDTYYADSV KGRFTISRDNKNTVYLQMNSLKPEDTAVYYCKRFRTA AQGTDYWGQGTLVTVSSA

Figure 2 (continued)

SEQ ID NO	Description	Sequence
89	Reference Compound	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNAKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGT LVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGSEVQLVESGGGVVQPGNSLRLSCAASGFTFSFGMS WVRQAPGKGLEWVSSISGSGSDTLYADSVKGRFTISR D NAKTTLYLQMNSLRPEDTALYYCTIGGSLRSSQGT LVT VSSA
90	Reference Compound	DVQLVESGGGLVQAGGSLRLSCAASGITFSINTMGWYR QAPGKQRELVALISSIGDTYYADSVKGRFTISRDNAKNT VYLQMNSLKPEDTAVYYCKRFRTAAQGTDYWGQGT LVTVSSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGG GGSEVQLVESGGGVVQPGSLRLSCAASGFTFRSFGMS WVRQAPGKGPEWVSSISGSGSDTLYADSVKGRFTISR D NSKNTLYLQMNSLRPEDTALYYCTIGGSLRSSQGT LVT VSSA

Figure 3A

1	EVQLVESGGG	LVQPGNSLRL	SCAASGLTFS	SFGMSWVRQA	PGKGLEWVSS	ISGSGSDTLY	ADSVKGRFTI	SRDNAKTTLY	LQMNSLRPED	TAVVYCTIGG	SLSRSS	-----	QGTILVT	VSS
2	L	G	R	P	P	P	S	N						115
79	V	V	R	P	P	P	S	N		L				115
80	V	V	R	P	P	P	S	N		L				115
15	A	G	L	Y	A	G	F	R	V	R	G	Y	Y	123

Figure 3B

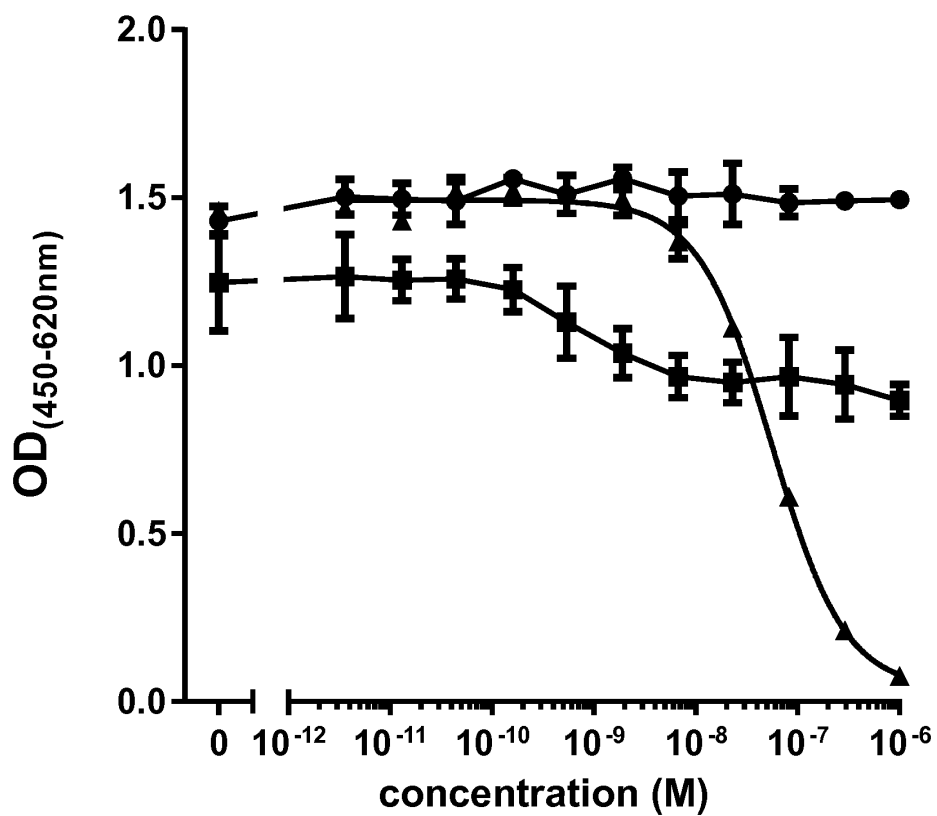
15	EVQLVESGGG	LVQAGGSLRL	SCAASGLTFS	SYAMGWFRQA	PGKERERVVS	ISRGGGYTTY	ADSVKGRFTI	SRDNAENTVY	LQMNSLKPED	TAVVYCAAAAR	YWATGSEYEF	DYWGQGT	LVLT	VSS
1	P	N	F	S	V	F	G	S	D	L				115
2	L	P	R	F	S	V	G	P	W	S				115
79	V	P	N	F	S	V	G	P	W	S				115
80	V	P	N	F	S	V	G	P	W	S				115

Figure 4A

15	EVOLVESGGG	LVQAGGSLRL	SCAASGLTFS	SYAMGWFRQA	PKKERERVVS	ISRGGGYTTY	ADSVKGRFTI	SRDNAENTVY	LOMNSLKPED	TAVYYCAAAR	YWATGSEYEF	DYWGQGTLLV	VSS	123
16	V	V	V	V	V	V	V	V	V	L	V	V	V	123
17	V	V	V	V	V	V	V	V	V	L	V	V	V	123
18	V	V	V	V	V	V	V	V	V	L	V	V	V	123
19	V	V	V	V	V	V	V	S	V	L	V	V	V	123
20	V	V	V	V	V	V	V	S	V	L	V	V	V	123
21	V	V	V	V	V	V	V	S	V	L	V	V	V	123
22	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
23	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
24	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
25	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
26	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
27	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
28	V	V	V	V	V	V	V	S	V	L	V	V	V	123
29	V	V	V	V	V	V	V	S	V	L	V	V	V	123
30	V	V	V	V	V	V	V	S	V	L	V	V	V	123
31	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
32	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
33	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
34	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
35	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
36	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
37	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
38	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
39	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
40	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
41	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
42	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
43	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
44	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
45	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
46	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
47	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
48	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
49	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
50	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
51	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
52	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
53	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
54	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
55	V	V	V	V	V	V	V	SK	V	L	V	V	V	123
56	V	V	V	V	V	V	V	SK	V	L	V	V	V	123

[illegible]

Figure 5



▲ = SEQ ID NO: 1 (tagged)

■ = SEQ ID NO: 15 (tagged)

10 ● = cAblys3 (tagged)

Figure 6

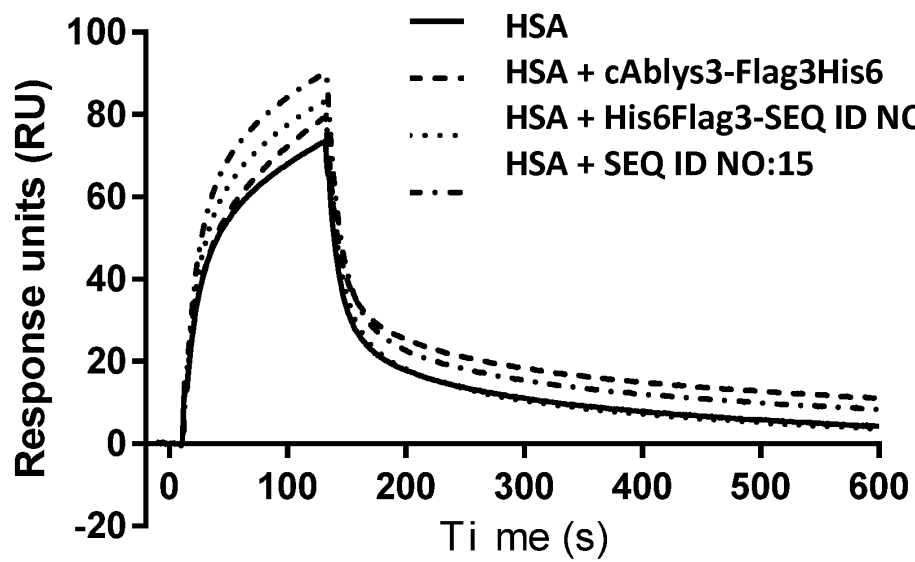


Figure 7

X-ray source	PXI/X06SA (SLS ¹)
Wavelength [Å]	1.0000
Detector	EIGER X 16M
Temperature [K]	100
Space group	P 2 ₁ 2 ₁ 2 ₁
Cell: a; b; c; [Å]	50.67; 121.58; 151.70
α; β; γ; [°]	90.0; 90.0; 90.0
Resolution [Å]	2.80 (3.05-2.80)
Unique reflections	23319 (5157)
Multiplicity	4.2 (4.1)
Completeness [%]	97.7 (97.5)
R _{sym} [%] ³	6.0 (43.8)
R _{meas} [%] ⁴	6.9 (49.9)
Mean(I)/sd ⁵	17.57 (3.71)

¹ SWISS LIGHT SOURCE (SLS, Villigen, Switzerland)

² values in parenthesis refer to the highest resolution bin.

$$^3 R_{sym} = \frac{\sum_h \sum_i^{n_h} |\hat{I}_h - I_{h,i}|}{\sum_h \sum_i^{n_h} I_{h,i}} \text{ with } \hat{I}_h = \frac{1}{n_h} \sum_i^{n_h} I_{h,i}$$

where $I_{h,i}$ is the intensity value of the i th measurement of h

$$^4 R_{meas} = \frac{\sum_h \sqrt{\frac{n_h}{n_h - 1}} \sum_i^{n_h} |\hat{I}_h - I_{h,i}|}{\sum_h \sum_i^{n_h} I_{h,i}} \text{ with } \hat{I}_h = \frac{1}{n_h} \sum_i^{n_h} I_{h,i}$$

where $I_{h,i}$ is the intensity value of the i th measurement of h

⁵ calculated from independent reflections

Figure 8

Resolution [Å]	94.87-2.80
Number of reflections (working /test)	22643 / 676
R_{cryst} [%]	21.4
R_{free} [%] ²	27.8
Total number of atoms:	
HSA	4625
Nanobody	952
Water	1
Deviation from ideal geometry: ³	
Bond lengths [Å]	0.012
Bond angles [°]	1.43
Bonded B's [Å ²] ⁴	3.8
Ramachandran plot: ⁵	
Most favoured regions [%]	92.9
Additional allowed regions [%]	7.0
Generously allowed regions [%]	0.2
Disallowed regions [%]	0.0

¹ Values as defined in REFMAC5, without sigma cut-off

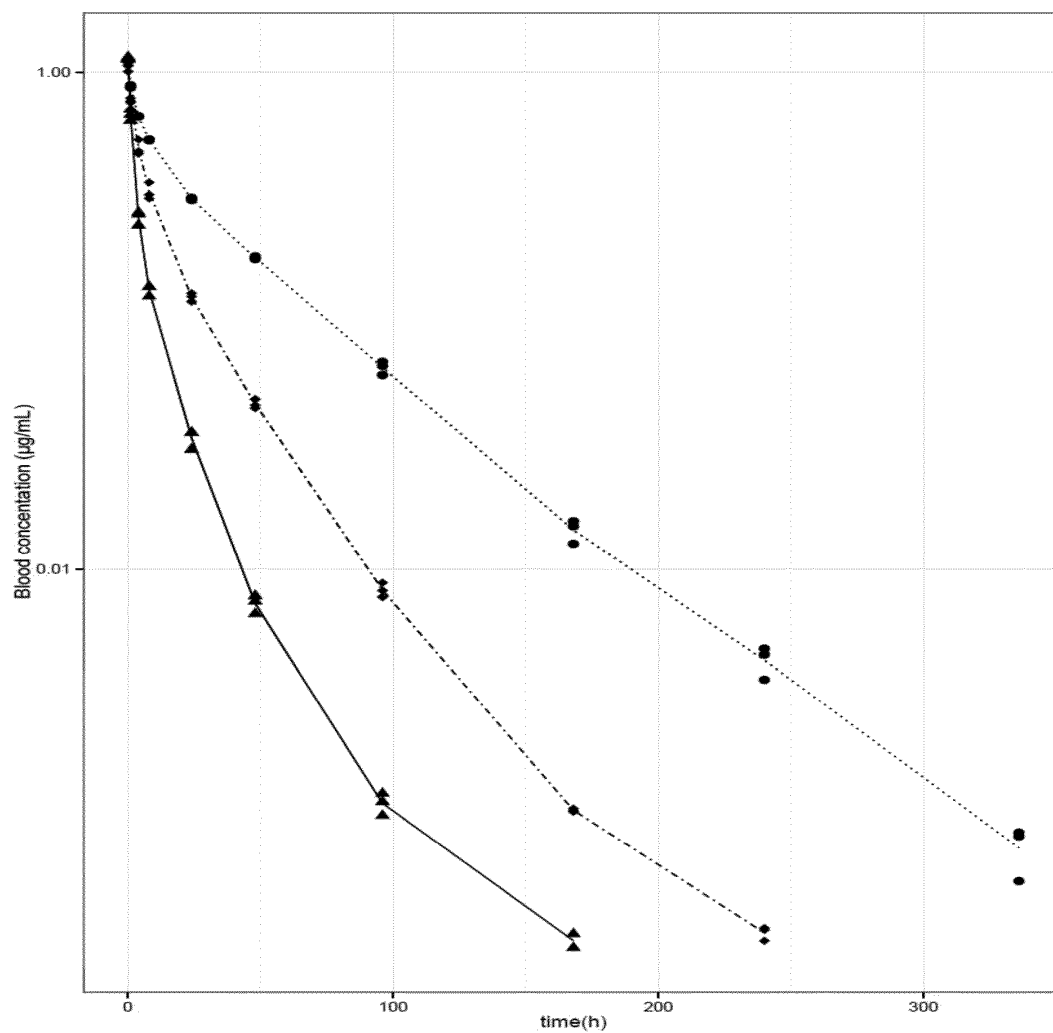
² Test-set contains 2.9% of measured reflections

³ Root mean square deviations from geometric target values

⁴ Calculated with MOLEMAN

⁵ Calculated with ProCHECK

Figure 9



● = SEQ ID NO: 82 (invention)

▲ = SEQ ID NO: 89 (reference)

10 ◆ = SEQ ID NO: 90 (reference)

Figure 10

Amino acid residue on HSA	A.a. residue in SEQ ID NO: 15 (*)	Position (Kabat)	Amino acid residue on HSA	A.a. residue in SEQ ID NO: 15 (*)	Position (Kabat)
MET298	TYR101	97	ARG337	ALA103	99
PRO299	ARG53	52a	HIS338	ALA103	99
ALA300	ARG53	52a	PRO339	TYR101	97
ASP301	SER52	52	ASP340	TYR101	97
ASP301	GLY56	55	ALA443	TYR101	97
LEU302	TYR57	56	PHE374	THR104	100
PRO303	TYR57	56	PHE374	TYR108	100d
LEU305	ALA103	99	ASP375	ARG47	47
ALA306	TYR59	58	ASP375	SER106	100b
GLU311	LYS65	64	LYS378	GLU107	100c
TYR334	ALA103	99	LYS378	TYR108	100d
ARG337	TRP102	98	VAL381	TYR108	100d
(*) Note: numbering according to the amino acid residues in the sequence of SEQ ID NO:15. For ease of reference, ARG53, TYR101, GLU107 and TYR108 (some of the most important residues in the interaction between SEQ ID NO:15 and human serum albumin) have been indicated in bold/underline in the sequence below: EVQLVESGGGLVQAGGSLRLSCAASGLTFSSYAMGWERQAPGKERERVVSIS <u>RG</u> GGGYTTYADSVKGRFTISRDNAENTVYLQMNSLKPED TAVYYCAAAR <u>Y</u> WATG <u>SEY</u> EFDYWGQGLVTVSS [SEQ ID NO:15]					

Figure 11

Mouse	MKWVTFLLLLFVSGSAFSR---GVFRREA---HKSEIAHRYNDLGEQHFKGLVLIAFSQY	54
Rat	MKWVTFLLLLFISGSAFSR---GVFRREA---HKSEIAHRFKDLGEQHFKGLVLIAFSQY	54
Dog	MKWVTFISLFFLFSSAYS---GLVRREA---YKSEIAHRYNDLGEEHFRGLVLVAFSQY	54
Cat	MKWVTFISLFFFSSAYS---GVTRREA---HQSEIAHRFNDLGEEHFRGLVLVAFSQY	54
Human	MKWVTFISLFLFSSAYS---GVFRDA---HKSEVAHRFKDLGEENFKALVLIAFAQY	54
Cow	MKWVTFISLFFFSSAYS---GVFRRTD---HKSEIAHRFKDLGEEHFKGLVLIAFSQY	54
Sheep	MKWVTFISLFFFSSAYS---GVFRRTD---HKSEIAHRFNDLGEENFQGLVLIAFSQY	54
Pig	MKWVTFISLFLFSSAYS---GVFRRTD---YKSEIAHRFKDLGEQYFKGLVLIAFSQH	54
Horse	MKWVTFVSLFLFSSAYS---GVLRRDT---HKSEIAHRFNDLGEKHFKGLVLVAFSQY	54
Rabbit	MKWVTFISLFLFSSAYS---GVFRREA---HKSEIAHRFNDVGEEHFIGLVLITFSQY	54
Mouse	LQKCSYDEHAKLVQEVTDFAKTCVADESAANCDKSLHTLFGDKLCAIPNLRENYGELADC	114
Rat	LQKCPYEEHIKLVQEVTDFAKTCVADENAENCDKSIHTLFGDKLCAIPKLRDNYGELADC	114
Dog	LQQCPFEDHVKLAKKEVTEFAKACAAESGANCDKSLHTLFGDKLCTVASLRDKYGMADC	114
Cat	LQQCPFEDHVKLNVETEFAGKCVADQSAANCEKSLHELLGDKLCTVASLRDKYGMADC	114
Human	LQQCPFEDHVKLNVETEFAGKCVADSAENCDKSLHTLFGDKLCTVATLRETYGMADC	114
Cow	LQQCPFEDHVKLNVETEFAGKCVADSHAGCEKSLHTLFGDELCKVASLRETYGMADC	114
Sheep	LQQCPFEDHVKLNVETEFAGKCVADSHAGCEKSLHTLFGDELCKVASLRETYGMADC	114
Pig	LQQCPYEEHVKLVRVETEFAGKCVADSAENCDKSIHTLFGDKLCAIPSLREHYGLADC	114
Horse	LQQCPFEDHVKLNVETEFAGKCAADESAENCDKSLHTLFGDKLCTVATLRATYBELADC	114
Rabbit	LQKCPYEEHAKLVKEVTDLAKACVADESAANCDKSLHDI FGDKICALPSLRDITYGDVADC	114
Mouse	CTKQEPERNECFLQHKKDDNPSLP-PFERPEAEAMCTSFKENPTTFMGHYLHEVARRHPYF	173
Rat	CAKQEPERNECFLQHKKDDNPNLP-PFQRPAAEAMCTSFQENPTSFGLHYLHEVARRHPYF	173
Dog	CEKQEPDRNECFLAHKKDDNPGFP-PLVAPEPDALCAAFQDNEQLFLGKLYEIAARRHPYF	173
Cat	CEKQEPERNECFLQHKKDDNPGFP-QLVTPEADAMCTAFHENEQRFLGKLYEIAARRHPYF	173
Human	CAKQEPERNECFLQHKKDDNPNLP-RLVRPEVDVMCTAFHDNEETFLKLYEIAARRHPYF	173
Cow	CEKQEPERNECFLSHKDDSPDLP-KLK-PDPNTLCDEFKADEKKFWGKLYEIAARRHPYF	172
Sheep	CEKQEPERNECFLNHKDDSPDLP-KLK-PEPDTLCAEFKADEKKFWGKLYEVARRRHPYF	172
Pig	CEKEPERNECFLQHKKDDNPDIP-KLK-PDPVALCADFQEDQKFWGKLYEIAARRHPYF	172
Horse	CEKQEPERNECFLTHKDDHPNLP-KLK-PEPDAQCAAFQEDPKFLGKLYEVARRRHPYF	172
Rabbit	CEKQEPERNECFLHHKDDKPDLP-PFARPEADVLCKAFHDEKAFFGHLYEVARRRHPYF	173
Mouse	YAPELLYAEQYNEILTQCCAEADKESCLTPKLDGVKEKALVSSVRQRMKCSSMQKFGER	233
Rat	YAPELLYAEKYNEVLTQCTESDKAACLTPLKLDVKEKALVAVRQRMKCSSMQKFGER	233
Dog	YAPELLYAQYKGVFAECCQAADKAACLGPKIEALREKVLSSAKERFKCASLQKFGER	233
Cat	YAPELLYAEYKGVFTECCAEADKAACLTPLKVDALREKVLASSAKERLKCASLQKFGER	233
Human	YAPELLFFAKRYKAAFTQCCQAADKAACLLPKLDELDEGKASSAKQRLKCASLQKFGER	233
Cow	YAPELLYYANKYNGVFQECQAEDKGACLLPKIETMREKVLTSARQRLRCASIQKFGER	232
Sheep	YAPELLYYANKYNGVFQECQAEDKGACLLPKIDAMREKVLASSARQRLRCASIQKFGER	232
Pig	YAPELLYYAIYKDVSECCQAADKAACLLPKIEHLREKVLTSAAKQRLKCASIQKFGER	232
Horse	YGPPELLFHAEYKADFTECCPADDKLACLPKLDALKERILLSSAKERLKCSSFNQFGER	232
Rabbit	YAPELLYYQYKAILTECCAEADKGACLTPLKLDALLEGKSLISAAQERLRCASIQKFGER	233
Mouse	AFKAWAVARLSQTFPNADFAEITKLATDLTKVNKECCHGDLLCADDRAELAKYMCENQA	293
Rat	AFKAWAVARMSQRFPAEFAEITKLATDLTKINKECCHGDLLCADDRAELAKYMCENQA	293
Dog	AFKAWVARLSQRFPAEFAEISKVTDLTQVHKECCHGDLLCADDRAELAKYMCENQD	293
Cat	AFKAWVARLSQKFPKAEFAEISKVTDLTQVHKECCHGDLLCADDRAELAKYMCENQD	293
Human	AFKAWVARLSQRFPAEFAEISKVTDLTQVHTECCHGDLLCADDRAELAKYMCENQD	293
Cow	ALKAWVARLSQKFPKAEFVEVTKLVTDLTQVHKECCHGDLLCADDRAELAKYICDNQD	292
Sheep	ALKAWVARLSQKFPKADFTDVTIKVTDLTQVHKECCHGDLLCADDRAELAKYICDHQD	292
Pig	AFKAWSLARLSQRFPAEFAEISKVTDLAKVHKECCHGDLLCADDRAELAKYICENQD	292
Horse	AVKAWVARLSQKFPKADFAEVSISKVTDLTQVHKECCHGDLLCADDRAELAKYICEHQD	292
Rabbit	AYKAWALVRLSQRFPAEFAEISKVTDLTQVHKECCHGDLLCADDRAELAKYMCHEHQE	293

Figure 11(continued)

Mouse	TISSKLQTCCKPVLKKAHCLSEVEHDTMPADLPAIAADFVEDQEVCKNYAEAKDVFLGT	353
Rat	TISSKLQACCDKPVLEKQCLAIEHDNI PADLPSIAADFVEDKEVCKNYAEAKDVFLGT	353
Dog	SISTKLKECCDKPVLEKQCLAEVERDELPGDLPSLAADFVEDKEVCKNYQEAADVFLGT	353
Cat	SISTKLKECCGKPVLEKSHCISEVERDEL PADLPP LAVDFVEDKEVCKNYQEAADVFLGT	353
Human	SISSKLKECCEKPLLEKSHCIAEVENDEMPADLPSLAADFVESKDVCKNYAEAKDVFLGM	353
Cow	TISSKLKECCDKPLLEKSHCIAEVEKDAI PENLPPLTADFAEDKDVCKNYQEAADFLGS	352
Sheep	ALSSKLKECCDKPVLEKSHCIAEVDKDAV PENLPPLTADFAEDKEVCKNYQEAADVFLGS	352
Pig	TISTKLKECCDKPLLEKSHCIAEAKRDEL PADLNPLEHDFVEDKEVCKNYKEAKHVFLGT	352
Horse	SISGKLKACCDKPLLQKSHCIAEVKEDDLPSDLPALAADFAEDKEICKHYKDAADVFLGT	352
Rabbit	TISSHLKECCDKPILEKAHCTYGLHNDET PAGLPAVAREFVEDKDVCKNYEEAKDLFLGK	353
Mouse	FLYEYSRRHPDYSVSLLLRLAKKYEATLEKCCAANPPACYGTVLAEFQPLVEEPKNLVK	413
Rat	FLYEYSRRHPDYSVSLLLRLAKKYEATLEKCCAEGDPPACYGTVLAEFQPLVEEPKNLVK	413
Dog	FLYEYARRHPEYSVSLLLRLAKYEATLEKCCATDDPPTCYAKVLDEFKPLVDEPQNVLK	413
Cat	FLYEYSRRHPEYSVSLLLRLAKYEATLEKCCATDDPPACYAHVFDEFKPLVEEPHNLVK	413
Human	FLYEYARRHPDYSVSLLLRLAKTYETTLEKCCAAADPHECYAKVFDEFKPLVEEPQNLIK	413
Cow	FLYEYSRRHPEYAVSVLLRLAKYEATLECCAKDDPHACYSTVFDKLKHLVDEPQNLIK	412
Sheep	FLYEYSRRHPEYAVSVLLRLAKYEATLECCAKEDPHACYATVFDKLKHLVDEPQNLIK	412
Pig	FLYEYSRRHPDYSVSLLLRIAKIYEATLECCAKEDPPACYATVFDKFQPLVDEPKNLIK	412
Horse	FLYEYSRRHPDYSVSLLLRIAKTYEATLEKCCAADPPACYRTVFDQFTPLVEEPKSLVK	412
Rabbit	FLYEYSRRHPDYSVSLLLRLGKAYEATLKCCATDDPHACYAKVLDEFQPLVDEPKNLVK	413
Mouse	TNCDLYEKLGEYGFQNAIILVRYTQKAPQVSTPTLVEAARNLGRVGT KCCTL PEDQRLPCV	473
Rat	TNCELYEKLGEYGFQNAIILVRYTQKAPQVSTPTLVEAARNLGRVGT KCCTL PEAQRLPCV	473
Dog	TNCELFEKLGEYGFQNAIILVRYTKKAPQVSTPTLVEVSRKLGKVGTKCKKKPESERMSCA	473
Cat	TNCELFEKLGEYGFQNAIILVRYTKKVPQVSTPTLVEVSRSLGKVGSKCCTHPEAERLSCA	473
Human	QNCLEFEQLGEYKFQNAIILVRYTKKVPQVSTPTLVEVSRNLGKVGSKCKKHPEAKRMPCA	473
Cow	QNCQDFEKLGEYGFQNAIILVRYTRKVPQVSTPTLVEVSRSLGKVGTRCCTKPESERMPCT	472
Sheep	KNCELFEKHGEYGFQNAIILVRYTRKAPQVSTPTLVEISRSLGKVGTKCCAKPESERMPCT	472
Pig	QNCLEFEKLGEYGFQNAIILVRYTKKVPQVSTPTLVEVARKLGLVGSRCCKRPEEERLSCA	472
Horse	KNCDLFEEVG EYDFQNAIILVRYTKKAPQVSTPTLVEIGRTL GKVGSRCCKLPESERLPCS	472
Rabbit	QNCLEYEQLGDYFNQNAIILVRYTKKVPQVSTPTLVEISRSLGKVGSKCKKHPEAERLPCV	473
Mouse	EDYLSAILNRVCLLHEKTPVSEHVT KCCSGSLVERRPCFSALTVD ETVVPKEFKAETFTF	533
Rat	EDYLSAILNRVCLLHEKTPVSEKVT KCCSGSLVERRPCFSALTVD ETVVPKEFKAETFTF	533
Dog	EDFLSVVLNRVCLLHEKTPVSEKVT KCCSESLVNRRCFSGLEVD ETVVPKEFNAETFTF	533
Cat	EDYLSVVLNRVCLLHEKTPVSEKVT KCCTESLVNRRCFSAQVDETVVPKEFSAETFTF	533
Human	EDYLSVVLNQLCVLHEKTPVSDRVTKCCTESLVNRRCFSALEVD ETVVPKEFNAETFTF	533
Cow	EDYLSLILNRVCLLHEKTPVSEKVT KCCTESLVNRRCFSA LTPDETVVPKAFDEKLFTF	532
Sheep	EDYLSLILNRVCLLHEKTPVSEKVT KCCTESLVNRRCFSDLTLDETVVPKPFDEKFTF	532
Pig	EDYLSVLNRVCLLHEKTPVSEKVT KCCTESLVNRRCFSA LTPDETVVPKEFVEGTFTF	532
Horse	ENHLALALNRVCLLHEKTPVSEKIT KCCDLSLAERRPCFSALELDEGYVPKEFKAETFTF	532
Rabbit	EDYLSVVLNRVCLLHEKTPVSEKVT KCCSESLVDRRCFSA LGPDETVVPKEFNAETFTF	533
Mouse	HSDICTLPEKEKQIKKQTALAEVLVHKHPKATAEQLKTVMD DFAQFLDTCKAADKDT CFS	593
Rat	HSDICTLPDKEKQIKKQTALAEVLVHKHPKATEDQLKTVMG DFAQFVDKCKAADKDNCF A	593
Dog	HADLCTLPEAEKQIKKQTALVELLKHHPKATDEQLKTVMG DFGAFVEKCCAAENKEGCFS	593
Cat	HADLCTLPEAEKQIKKQSALVELLKHHPKATEEQLKTVMG DFGSFVDKCCAAEDKEACF A	593
Human	HADICTLSEKERQIKKQTALVELVHKHPKATKEQLKAVMD DFAAFVEKCKKADDETCF A	593
Cow	HADICTLPDTEKQIKKQTALVELLKHHPKATEEQLKTVME NFVAFVDKCCAAEDKEACF A	592
Sheep	HADICTLPDTEKQIKKQTALVELLKHHPKATDEQLKTVME NFVAFVDKCCAAEDKEGCFV	592
Pig	HADLCTLPEDEKQIKKQTALVELLKHHPKATKEQLRTVLGN FAFVQKCCAAPDHEACF A	592
Horse	HADICTLPDEKQIKKQSALAEVLVHKHPKATKEQLKTVLGN FSAFVAKCCGREDKEACF A	592
Rabbit	HADICTLPETERKIKKQTALVELVHKHPKATNDQLKTVVGE FTALLDKCCSAEDKEACF A	593

Figure 11(continued)

Mouse	TEGPNLVTRCKDTLA---	608
Rat	TEGPNLVARSKEALA---	608
Dog	EEGPKLVAAAQAALV---	608
Cat	EEGPKLVAAAQAALA---	608
Human	EEGKKLVAASQAALGL--	609
Cow	VEGPKLVVSTQTALA---	607
Sheep	LEGPKLVASTQAALA---	607
Pig	VEGPKFVIEIRGILA---	607
Horse	EEGPKLVASSQLALA---	607
Rabbit	VEGPKLVESKATLG---	608