

CHAPTER 12

Appendix

12.1 Tables of Peptides, Synthesized on Membranes

Table 12.1: Peptides synthesized on membranes shown in Fig. 6.7

Binding of CD2BP2-GYF to peptides derived from splicing factors, containing the reduced motif PPG. A protein description is given in column 'Description'. Protein names and Swiss-Prot entry names are listed in the column 'Protein'. Binding classification: (–): < 5 x background [BLU] (Boehringer Light Units); (+): 5–25 x background [BLU]; (++): 25–125 x background [BLU]; (+++): > 125 x background [BLU].

SPOT-number	Description	Sequence	Binding	Protein
1	CD2BP2 interaction partner	SHRPPPPGHR	+++	Human CD2
2		LGSGLPPPPGMPPPGSF	+	
3		PPPGMPPPGSFPPVP	–	
4		FPPPVPPPGALPPGIP	+	Splicing factor 3B
5	Part of the U2 snRNP	PPPGALPPGIPPAMPP	–	subunit 4
6		MPPPMPPPGAAGHGPP	–	(Q15427)
7		GHPHAGPPGSGGQPPP	–	
8		QPPPRPPPGMPHPGPP	+	
9	Associates with	HDFRSPPPGMGLNQR	+++	Splicing factor,
10	U4/U6•U5	PPTSGAPPGSGPGPTP	–	Pro- and Glu-rich
11	tri-snRNP	PAVTSAPPGAPPPTPP	+	(P23246)
12	Vertebrate homolog to	YCLAPPPPGIDVTTY	–	Splicing factor,
	<i>Drosophila melanogaster</i> splicing			Arg/Ser-rich 8
13	regulator, suppressor-of-white-apricot	TTTAPPPPGTTPPPPP	–	(Q12872)
14		GAPTQYPPGLGPPPPM	–	
15	Close homolog to SmB	MGRGAPPMMGPPPG	+	SNRPB protein
16		PGMMGPPPGMRPPMGP	+	(Q15182)
17		FLTGPPPPGMRPPRP	+++	
18		GMPTVIPPLTREQER	++	
19		MNQGPHPPGHGPPPM	–	Splicing factor 1
20	Mammalian branch-point	GVQPPLPPGAPPPPP	+	SF1-Bo isoform
21	binding protein BBP,	PPPPPPPGSAGMMIP	–	(Q15637-2)
22	interacts with U1 snRNA	MNQGPHPPGHGPPPM	–	
23		GVQPPLPPGAPPPPP	+	(Q15637-1)
24		PPPPPPPGSAGMMYA	–	
25		VGRATPPPGIMAPP	+	
26	Human SNRPN gene with	PGIMAPPGMRPPMGP	+	RT-LI
27	novel exon 3	TPIGMPPPGMRPPPPG	++	(Q9BPU5)
28		PGMRPPPPGIRGEAFL	++	
29		MGRGAPPMMGPPPG	+	
30		PGMMGPPPGMRPPMGP	+	
31	Core snRNP protein	TPMGMPPPGMRPPPPG	+	SmB/B'
32		PGMRPPPPGMRGPPPP	+++	(P14678)
33		GMRGPPPPGMRPPRP	++	
34		VGRATPPPGIMAPP	+	
35	Tissue-specific splicing	PGIMAPPGMRPPMGP	+	Sm-D (SNRPN)
36	protein	TPIGMPPPGMRPPPPG	++	(P14648)
37		PGMRPPPPGIRGPPPP	+++	
38		GIRGPPPPGMRPPRP	+++	
39		QPPYMPPPGMIPPGL	+	U1 small nuclear
40	Part of the U1 snRNP	PPGMIPPPGLAPGQIP	–	ribonucleoprotein
41		LAPGQIPPGAMPPQQL	–	A (P09012)

Table 12.2: Peptides synthesized on membranes shown in Fig. 8.3

List of peptides, synthesized on the membranes, shown in Fig. 8.3. The membranes were incubated with CD2BP2-GYF GST-fusion protein. The first column refers to the numbers in Fig. 8.3. The column 'Sequence' and 'Accession Number/Description' give the sequence of each peptide and the identifier in Swiss-Prot, EMBL, and TrEMBL databases of the corresponding proteins or a description of the peptide, respectively. Lists of peptides on different membranes are separated by rows indicating the motif applied for the database search.

SPOT-number	Sequence	Accession Number/Description			
PPG[AEFHILMSTWY] x (0,40) PPG[AEFHILMSTWY]					
1	SHRPPPPGHR	Control	60	VPPGAGPPGLGGPRPV	
2	SQAPSHRPPPPGHRVQ		61	PGEDRTPPGLAAEPEP	HCN4_HUMAN
3	ATSQHPPPPGHRVQA		62	AAIFRPPPPGSGLGNLG	
4	VMQKRSRAIHSSDEGE		63	SSSSSPPPGACGSPSA	
5	NIpYSVPHDSTQ	Negative Control	64	AQPSFAPPGARGGLGL	
6	PSSGDAPPAPLALTA	A1AD_HUMAN	65	PGQLGQPPGELSLGLA	
7	PDPDFEPPGTPEMQAP	A1AD_HUMAN	66	PRGGLSPPGHSPGPPR	
8	AYPGQAPPAYPGQAP	AAH53667	67	SHRPPPPGHR	Control
9	AYPGQAPPAYHGAPG		68	VMQKRSRAIHSSDEGE	
10	PQLPPGPPGAPKPPPA	AAM20739	69	NIpYSVPHDSTQ	Negative Control
11	MGGQAPPGLGPILED		70	HPALPLPPGFHPPHGP	KLF4_HUMAN
12	QGTAPPPGAPQGGPPG		71	HYQELMPPGSCMPEEP	
13	PGAPQGGPAAASGPPP		72	AYPGQAPPAYPGQAP	LEG3_HUMAN
14	SLHHLQPPGAPALLFP		73	AYPGQAPPAYHGAPG	
15	ELPDGAPPGHPPGSGG	AAO92063	74	PVTTQNPAGAPPNVLV	MGD1_HUMAN
16	GAPPGHPPGSGGAESA		75	PLAWQNPQWQTPPGW	
17	ELAGEMPPGLNFDLDA	AAP35525	76	PPGWQTPPGWQTPPGW	
18	ALNLSGPPGASGEQCL		77	PPGWQTPPGWQGGPDW	
19	MVPPPPGEESSQTVI	AAP35537	78	AQSLVPPPGLPSSSTP	MK07_HUMAN
20	SQTVILPPGWQSYLSP		79	GVLPHYFPPGLPPPDAG	
21	GGAPTQPPGLRPQTQT	AAP35632	80	EAAACLPPEGWVGRCQ	NTC3_HUMAN
22	DVNLPRPPGALCEQKR		81	RFLCSCPPGYQGRSCR	
23	PGAPGMPPGIPPLMPG	AAP36029	82	RAICTCPPGFTGGACD	
24	PVMPGMPPGLHHQRKY		83	GFRCLCPPGSLPPLCL	
25	PLMPGMPPGMPVPER		84	SFTCTCPPGYGGFHCE	
26	PVETPLPPGLRSAGEE	AIRE_HUMAN	85	GAYCLCPPGWSGRLCD	
27	GEEVVRGPPGEPLAGMD		86	RYLCSPPGTLGVLCE	
28	EYVCCPPPGTDPDSGT	APP1_HUMAN	87	GFRCTCPPGYTGLRCE	
29	PSTRSWPPGSRVEGAE		88	GPRCACPPGLSGPSCR	
30	SHRPPPPGHR	Control	89	RSFPGSPPGASNASCA	
31	VMQKRSRAIHSSDEGE		90	LGPLLCPGGAFLPGLK	
32	NIpYSVPHDSTQ	Negative Control	91	QIQCHCPPGFEGHACE	NTC4_HUMAN
33	VGRATPPPGIMAPPPG	CAA34288	92	FHLCLCPPGFIGPDCE	
34	PGIMAPPPGMRPPMPG		93	SFNCLCPPGYTGSRCF	
35	TPIGMPPPGMRPPPPG		94	TFHCLCPPGLEGLQCE	
36	PGMRPPPPGIRGPPPP		95	SYFCHCPPGFQGSCLQ	
37	GIRGPPPPGMRPPRP		96	GFHCACPPGFVGLRCE	
38	CGNPGSPPGALKQFLP	CAD60192	97	HGALWLPFGFTRRPRT	
39	ALKQFLPPGTTGAAAS		98	SHRPPPPGHR	Control
40	SQHPPPPGHRVQAAPS	CD2_HUMAN	99	VMQKRSRAIHSSDEGE	
41	PSHRPPPPGHRVQHQP		100	NIpYSVPHDSTQ	Negative Control
42	SRMFQAPPGAPPPHPQ	DRPL_HUMAN	101	QCLNKMPPEIKVDDA	NUCM_HUMAN
43	NNASASPPGLGAQPLP		102	TEGYQVPPGATYTAIE	
44	GNSGPPPPGAFPHPLE		103	CGQDDGPPGSEDPERD	NXP3_HUMAN
45	AYKTATPPGYKPGSFP		104	LLGLLAPPGEAWGILG	
46	SFRGTGTPPGYRGTSFP		105	MSSMPPPPGMMFPPGM	O14776
47	LALQFPPGLHPPFPFH		106	PPGMMFPPGMPVPTAP	
48	LHPYGPMPGALPYNP	DVL2_HUMAN	107	MHRAVDPPGARAAREA	O15054
49	VPPAVQPPGAPPVVDL		108	SEQTGLPPGLPLPPPP	
50	SFRCDPPGLAVGMDG	FBN2_HUMAN	109	PAYTAHPPGHRLVPA	
51	SYSTCPPGYVFRFTET		110	PGPGPRPPGAESHGCL	
52	SFRICPPGYEVKSEN		111	CLPATRPPGSDLRESR	
53	GFQCLCPPGFVLSDNG		112	PYAPSRPPGLPGTTTS	
54	TFMCICPPGMARRPDG		113	VTQAPLPPGWQQRVDQ	O43584
55	GFTCKCPPGFTQHHHTA		114	DRPEPLPPGWERRVDN	
56	GYLCGCPPGYRVGQG		115	DPLGPLPPGWEKRTDS	
57	RRLPPPPGEPQPPSGS	FZD8_HUMAN	116	IQGPPGPPGEGKDRGP	O60505
58	GSGHGRPPGARPPHRG		117	FPFGIIPGGLKGRGA	O60630
59	SHYGGVPPGAGPPGLG	HAN2_HUMAN	118	PPPPGPPGALAVRPS	
			119	PAEPAPPPGAPPSPG	
			120	HAAPPPPPGEHSGIPF	O75048
			121	TPPPPPPPGEHSSSGG	
			122	RLAVQLPPGEDLNDWV	O75249
			123	QVRHLEPPGEGPPSRA	

124	TPTPLSPPGLGMSPA		199	HIREHEPPGALTELDL	Q86YC3
125	TDGCVCPPTVLLDER	O75851	200	NQLLGVPPGLFANARN	
126	MEARTLPPGMAAVTVV		201	YCLAPPPPGIDVTTY	Q8IV81
127	LPGRCRPPGLLLHDTR		202	TTTAPPPPGTTPPPPP	
128	APGCTCPPGLFLHNAS		203	DNPRRSPPGAGGSPPG	Q8IVC6
129	EQAQELPPGTVLTRNC		204	PGAGGSPPGAAPVPSA	
130	CQGEIVPPGETWQQVA		205	LLLLLPPPGSPEPPGL	Q8IVL6
131	NIALPPPPGIAPPPPP	O95607	206	PPGSPEPPGLTQLSPG	
132	GIAPPPPPGFPHMFH		207	KQDLSAPPGYTLTENV	Q8IWA9
133	SHRPPPPGHR	Control	208	RQAAHGPPGLHSDSHS	
134	VMQKRSRAIHSSDEGE		209	PPGPMGPPGETPCPPG	Q8IWL1
135	NIpYSVPHDSTQ	Negative Control	210	EAGERGPPGLPAHLDE	
136	GREPGPPPGSFLTSRR	O95785	211	PPGPMGPPGEMPCPPG	Q8IWL2
137	DAHLGLPPGLAKKSS		212	EPGERGPPGLPAHLDE	
138	NKAIKSPPGFSAKGLG		213	PPFPFPPPGAMFGASR	Q8IX92
139	AKKLPPPPGSPGLHSP		214	FASARSPPGAGAPASG	
140	RPLAASPPGTVKAEHEH		215	AYPGQAPPGAYPGQAP	Q8IXB9
141	TALPTAPPGLLGTPTA	PCB4_HUMAN	216	AYPGQAPPGAYPGAPG	
142	PASPGPPPGLAAYTAK		217	HCNVTCPPLHGADCA	Q8IXF3
143	GLPNRLPPGAVPPGAR	PSMF1_HUMAN	218	RAPSPPPPGSEAAPSP	
144	LPPGAVPPGARFDFPG		219	RDPTRPPGLPEEATA	
145	NPDLHLPPPGYDDMYL		220	SHRPPPPGHR	Control
146	PRGEAGPPGSKEKGER	Q02802	221	VMQKRSRAIHSSDEGE	
147	VPGPPGPPGAMGPPGP		222	NIpYSVPHDSTQ	Negative Control
148	AMGPPGPPGAPGAPG		223	LIGPALPPGFKARGTA	Q8IXQ4
149	PPGPRGPPGEGPLGPP		224	FFGPALPPGFKKQDSD	
150	LPGPPGPPGSLNSSE		225	IIGPALPPGFIKSTQK	
151	PPGPPGPPGSISSSSGQ		226	PVTTQNPAPPAPPNVLW	Q8IZ84
152	PRGPPGPPGASGDGSL		227	PLAWQNPQWQTPPGW	
153	LPGPPGPPGLPGTYSY		228	PPGWQTPPGWQTPPGW	
154	PPGPPGPPGIPGNVWS		229	PPGWQTPPGWQGPDPW	
155	QPGPQGGPGISKVFSA		230	SPAALGPPGYLHSAPG	Q8IZJ4
156	DRGPAGPPGHPGPPGP		231	APGEGPPPGTVLEPQS	
157	VQLSPAPPGEETSQW	Q07912	232	GLPNRLPPGAVPPGAR	Q8N1D6
158	TPSPLVPPGSSPLPPR		233	LPPGAVPPGARFDFPG	
159	GAPTQYPPGLGPPPPM	Q15182	234	NPDLHLPPPGYDDMYL	
160	MGRGAPPPGMMGPPPG		235	NECGYQPPGAPPGLGS	Q8N5L8
161	PGMMGPPPGMRPPMPG		236	YQPPGAPPGLGSMPPS	
162	FLTGPPPPGMRPPRP		237	FGVPPPPPGIHYQHLM	Q8N684
163	SYSCSCPFGHFWDQDT	Q86SJ5	238	PHLAVPPPGAIPPALH	
164	SYKCQCPPGHELTSAG		239	LPHNSLPPGSLGTFS	Q8NEZ4
165	SFQCECPPGYHLSSEHT		240	QDPYSQPPGTPRPVVD	
166	SFRICCPPGFQVQSDH		241	TDPYSQPPGTPRPVVD	
167	SFQCLCPPGFVLSDNQ		242	SDPYAHPPGTPRPGIS	
168	TFACVCPGMRPLPGS		243	RLPFSAPPGSVVEASS	
169	AFTCRCPPGFTQHHQA		244	LLLRGPPPGSANPPRL	
170	SHRPPPPGHR	Control	245	PCSLGLPPGHALQDIL	Q8NF26
171	VMQKRSRAIHSSDEGE		246	VLALLAPPGSTAEAR	
172	NIpYSVPHDSTQ	Negative Control	247	LPATVPPPGMPPPVMP	Q8NF45
173	PELPSGPPGLPSPPLP	Q86TR4	248	LPTSVPPPGMPPSLSS	
174	GQDGARPPGEGSSTGA		249	LSSATPPPGIAPPVPP	
175	GASPESPPGAIAVPEA		250	RPGMYPPPGSYRPPPP	
176	GQGAEGPPGTFRRTGK		251	PPPMGKPPGSIVRPSA	
177	AVPPHPPPGGLLPPAS	Q86U16	252	I PPPGLQPEPGY	Q8NFX5L
178	VPPP I P P P G M P P V G G L		253	REPGYTPPGAGNQNP	
179	TTLWQCPPGEEPDLDP	Q86V34	254	GAGNQNP G M Y P V T G P	
180	TLCRCPGPPGTFSAAWG		255	ELAGEMPPGLNFDLDA	Q8NI97
181	SRMFQADPGAPPHPQ	Q86V38	256	ALNLSGPPGASGEQCL	
182	NNASASPPGLGAQPLP		257	QPPPALPPGSGQPI PPT	Q8TAQ2
183	GNSGPPPPGAFPHPLE		258	PAGSGAPPGLSGPSEQ	
184	AYKTATPPGYKPGSFP		259	PQLPPGPPGAPKPPPA	Q8TB55
185	SFRGTGTPPGYRGTSPP		260	MGGQQAPPGLGPILED	
186	LALQPGPPGLHPFFFH		261	QGTAPPPPGAPQGGPPG	
187	HDFRSPPPGMGLNQNR	Q86VG2	262	PGAPQGGPPGAASGPP	
188	PPTSAGAPPGSGPPTP		263	SLHHLQPPGAPALLPP	
189	PAVTSAPPGAPPPTPP		264	SHRPPPPGHR	Control
190	PTRPPGMNGPSSL	Q86WW5	265	VMQKRSRAIHSSDEGE	
191	NSNTLTPPGAGMLGFP		266	NIpYSVPHDSTQ	Negative Control
192	HAAPPPPPGEGHSIGFP	Q86XD2	267	PRGPPGPPGFPGKPGM	Q8TEJ5
193	TPPPPPPPGEGHSSSGG		268	QPGPAGPPGFSRMGKA	
194	PPPPGPPGALAVRPS	Q86Y01	269	RMGKAGPPGLPGKVG	
195	PAEPAPPGAPPSPG		270	LRGPPGPPGLPGPSGI	
196	LPATVPPPGMPPPVMP	Q86YA8	271	AQGVPPGPPGFQGEPPG	
197	LPTSVPPPGMPPSLSS		272	QGGAPGPPGLPGPAGL	
198	LSSATPPPGIAPPVPP		273	EPGTRGPPGLIGPTGY	

274	PQGLGGPPGLPGSAGL				
275	EPGLPGPPGEGRAGEP				
276	PPGPPGPPGAPGAFDE	Q8TEJ5			
277	DCSQPCPPGHWGENCA	Q8TEK2			
278	TGACVCPGHSAGPCR				
279	GSQPPLPPGLPPGHYD				
280	PLPPGLPPGHYDSPKN				
281	GKPPGSALARGT	Q8TEN0			
282	PVTTQNPPGAPPNVSG				
283	PLAWQNPPGWQTPPGW				
284	PPGWQTPPGWQTPPGW				
285	PPGWQTPPGWQGPDPW				
286	PELPSGPPGLPSPPLP	Q8TER5			
287	GQDGARPPGEGSSTGA				
288	GASPESPPGAEAVPEA				
289	GQGAEGPPGTPRRTGK				
290	AGPRGPPGLCGLSLG	Q8TET1			
291	TQQEPEPPGSDSALDS				
292	KMVSMKPPGFQASLAR				
293	PGVPPHPPGTKSAASH				
294	GSSPRPPGLWYLATA				
295	LPLPPPPGEPSPAPP	Q8WX45			
296	PGEPSAPPGTCPGRYS				
297	DLMSLPPPGSEEEEE	Q8WX64			
298	PAIAAPPPGFRDNSSD				
299	TGQSPGPPGARRKLPQ				
300	GAATEHPPGSPTSATV				
301	PVTTQNPPGAPPNVLW	Q8WY92			
302	PLAWQNPPGWQTPPGW				
303	PPGWQTPPGWQTPPGW				
304	PPGWQTPPGWQGPDPW				
305	KSPGEVPPGTSPACIL	Q8WYN6			
306	CILATWPPGLLVLLWQ				
307	GERYSTPPGETLERY5	Q8WZ53			
308	LERYSTPPGETLERY5				
309	LERYSTPPGETLERY5				
310	LERYSTPPGETLERY5				
311	LERYSTPPGETLERY5				
312	LERYSTPPGEALERY5				
313	QHLKSSPPGFPPGPP	Q92576			
314	PPPLPPPGFGFAQNP				
315	GMPTVIPPGLTREQER	Q92744			
316	MNQGPHPPGHGPPPP				
317	GVQPPLPPGAPPPPP				
318	PPPPPPPGSAGMMIP				
319	GMPTVIPPGLTREQER	Q92745			
320	MNQGPHPPGHGPPPP				
321	GVQPPLPPGAPPPPP				
322	PPPPPPPGSAGMMYA				
323	QPPPALPPG5QPIPPT	Q92923			
324	PAGSGAPPGLSPSEY				
325	DYAYIPPPGLQPEPGY	Q93052			
326	REPGYTPPGAGNQNP				
327	GAGNQNP5GMYPV5TGP				
328	SHRPPPPGHR	Control			
329	VMQKRSRAIHSSDEGE				
330	NIpYSVPHDSTQ	Negative Control			
331	PPGPAGPPG5K5GDRGQ	Q96A83			
332	EKGPAGPPGLL5GPPGP				
333	PRGPPGPPGTPG5QGL				
334	TALPTAPPGLL5GTPYA	Q96AH7			
335	PASPGPPPG5LAAYTAK				
336	VTQAPLPPGWEQRVDQ	Q96F66			
337	DRPELPPGWE5RVDN				
338	DPLG5LPPGWEKRTDS				
339	KPP5PPPPGAP5THLP	Q96F80			
340	APPLIPPPG5PPPPGA				
341	PPG5PPPPGAP5PSLI				
342	AQSLVPPPG5LPG5STP	Q96G51			
343	GVLPYFPPGLPP5DAG				
344	SYSC5CP5G5HF5WQDT	Q96JP8			
345	SYK5C5CP5G5HELTAKG				
346	SFQ5C5CP5G5YHL5EHT				
347	SFRCICPPG5F5QV5SDH				
348	SFQ5CL5CP5G5F5V5L5DNG				
349	TFACVCP5PMR5PL5G5				
350	AFT5CR5CP5PG5FT5QH5H5QA				
351	YCEEL5CP5PG5SH5GA5H5CE	Q96K66			
352	TGECAC5CP5PG5WT5GAV5CA				
353	VCA5QC5CP5PG5TF5G5Q5N5CS	Q96K66			
354	LCQRIC5CP5PG5FY5GH5G5CA				
355	DCSQAC5CP5PG5FW5GP5AC5F				
356	SAD5PER5PP5GAT5CP5E5SP	Q96RK0			
357	EEEAS5G5PP5G5E5P5RL5D5SE				
358	G5PL5R5PP5PP5G5AG5GP5AT5P				
359	SIR5FT5L5PP5GT5ST5NG5KV				
360	AT5P5TE5Q5PP5G5AE5AP5LP5V				
361	KM5V5M5K5PP5GF5Q5AS5LAR	Q96RR9			
362	PGV5PP5H5PP5G5TK5SA5ASH				
363	SQH5PP5PP5PG5HR5SQ5APS	Q96TE5			
364	PSH5R5PP5PG5HR5V5QH5QP				
365	PR5GE5AG5PP5G5SG5EK5GER	Q99018			
366	VP5G5PP5G5PP5G5AM5GP5PP5G				
367	AM5G5PP5G5PP5G5AP5GP5AG5P				
368	V5GR5AT5PP5PG5IM5AP5PP5G	Q9BPU5			
369	PG5IM5AP5PP5G5MR5PP5M5GP				
370	TP5IG5M5PP5G5MR5PP5PP5G				
371	PG5MR5PP5PP5G5IR5GE5A5FL				
372	P5PT5G5AP5PG5SG5PG5TP	Q9BSV4			
373	PAV5TS5APP5G5AP5P5TP				
374	DY5L5Q5N5AP5PG5FF5P5RL5GV	Q9BUR5			
375	IK5KL5V5Y5PP5G5FM5GL5A5AS				
376	VT5QA5PL5PP5G5WE5QR5VD5Q	Q9BY75			
377	DR5PE5L5PP5G5WE5R5VD5N				
378	D5PL5G5L5PP5G5WE5K5RT5DS				
379	TAL5PT5APP5GL5L5G5TP5YA	Q9C064			
380	PAS5PG5PP5PG5LAAY5TAK				
381	TAL5PT5APP5GL5L5G5TP5YA	Q9GZT1			
382	PAS5PG5PP5PG5LAAY5TAK				
383	PAV5MQ5PP5G5M5PL5PP5AD	Q9H305			
384	G5PP5PY5E5PP5G5HP5MP5Q5PG				
385	AD5GT5YM5PP5G5FY5PP5G5P				
386	VT5QA5PL5PP5G5WE5QR5VD5Q	Q9H451			
387	DR5PE5L5PP5G5WE5R5VD5N				
388	D5PL5G5L5PP5G5WE5K5RT5DS				
389	SE5DL5L5PP5G5WS5VD5WT5M	Q9H4B6			
390	LE5RE5GL5PP5G5WE5RV5ESS				
391	PP5PT5TC5PP5G5AL5QA5PE5A	Q9H7J3			
392	RS5AP5KE5PP5G5L5PR5PL5GS				
393	PP5RM5PP5PP5G5F5SA5V5LL				
394	G5TP5PP5PP5G5L5VP5PI5SK				
395	PP5IS5K5PP5PP5G5F5S5GL5L5PS				
396	SHR5PP5PP5G5HR	Control			
397	VM5Q5KR5S5RA5IH5SS5DE5GE				
398	NI5p5YS5V5PH5D5ST5Q	Negative Control			
399	G5Q5D5GAR5PP5G5EG5S5ST5GA	Q9H7L6			
400	GAS5PE5SP5PG5AE5AV5PE5A				
401	G5Q5GA5EG5PP5G5TP5R5R5TG5K				
402	T5QQ5E5PE5PP5G5SD5S5AL5DS	Q9H7P7			
403	KM5V5M5K5PP5GF5Q5AS5LAR				
404	PGV5PP5H5PP5G5TK5SA5ASH				
405	G5SS5PR5PP5PP5G5L5W5YL5ATA				
406	P5QL5PP5G5PP5G5AP5K5PP5PA	Q9HB34			
407	M5GG5Q5Q5APP5GL5G5PI5LED				
408	Q5G5TA5Q5PP5G5AP5Q5G5PP5G				
409	PG5AP5Q5G5PP5G5A5AS5G5PP5P				
410	SL5H5HL5Q5PP5G5AP5ALL5PP				
411	TAL5PT5APP5GL5L5G5TP5YA	Q9HCU2			
412	PAS5PG5PP5PG5LAAY5TAK				
413	P5SS5D5APP5G5AP5L5AL5TA	Q9NPY0			
414	P5DP5DE5PP5G5TP5EM5Q5AP				
415	Q5HL5K5SS5PP5G5F5PP5G5PP	Q9NQ16			
416	PP5PL5PP5PP5G5F5G5FA5Q5NP				
417	L5PH5NS5L5PP5G5S5GL5GT5FS	Q9NR13			
418	Q5DP5YS5Q5PP5G5TP5R5PV5VD				
419	T5DP5YS5Q5PP5G5TP5R5PT5TV				
420	S5DP5YAH5PP5G5TP5R5PG5IS				
421	R5LP5FS5APP5G5SV5VE5ASS				
422	L5LL5R5G5PP5PP5G5SAN5P5P5RL				
423	PAV5MQ5PP5G5M5PL5PP5AD	Q9P112			

424	GPPPYEPPGHMPQPG	
425	ADGTYMPPGFYPPPGP	
426	LPHNSLPPGSGLGTFS	Q9P222
427	QDPYSQPPGTPRPVVD	
428	TDPYSQPPGTPRPPTV	
429	SDPYAHPPGTPRPGIS	
430	RLPFSAPPGSVVEASS	Q9P222
431	PRGEGAPPGSSEKGER	Q9UC14
432	VPGPPGPPGAMGPPGP	
433	AMGPPGPPGAPGAPAG	
434	QHLKSSPPGFPPGPP	Q9UI45
435	PPPLLPPPGFQAQNP	
436	TPMGMPPPGMRPPPPG	Q9UIS4
437	PGMRPPPPGMRPPPP	
438	GMRGPPPPGMRPPRP	
439	TPIGMPPPGMRPPPPG	Q9UKR4
440	PGMRPPPPGIRGPPPP	
441	GIRGPPPPGMRPPRP	
442	PPGPEGPPGSPGSPG	Q9UM16
443	EPGIQPPGLPGPPGP	
444	LPGPPGPPGSQSFY	
445	GLPPGPPPGAPPFLRP	Q9Y2W2
446	APPFLRPPGMPGLRGP	
447	GPPPGPPGLPPGPPPP	
448	RLPFPAPPGIPPPRPG	
449	PPLGPAPPGLFPPAPL	
450	RLSPAPPSPGSSLLKP	Q9Y5L9
451	LKPLTVPPGYTFPPAA	
452	AGQGGHPPGYTSLASR	Q9Y6C2
453	EAGPPGPPGLQGPPGP	
454	PPGAPGPPGSPGKDGQ	
455	FGPPIPPPGGGGAFG	RBMC_HUMAN
456	PGSLGGPPGFGSGPPG	
457	PGFGSGPPGLGSAPGH	
458	PIHIGPPPGFASSSGK	
459	VSMVPPPPGFSPIPPP	RBMG_HUMAN
460	FNPSQPPPGFMPPVP	
461	MGRGAPPMMGPPPPG	RSMB_HUMAN
462	PGMMGPPPGMRPPMGP	
463	TPMGMPPPGMRPPPPG	
464	PGMRPPPPGMRGPPPP	
465	GMRGPPPPGMRPPRP	
466	VGRATPPPGIMAPPPG	RSMN_HUMAN
467	PGIMAPPPGMRPPMGP	
468	TPIGMPPPGMRPPPPG	
469	PGMRPPPPGIRGPPPP	
470	GIRGPPPPGMRPPRP	
471	QPPYMPPPGMIPPPGL	RU1A_HUMAN
472	PPGMIPPPGLAPGQIP	
473	LAPGQIPPGAMPQQQL	
474	YSYPSLPPGYQNTTPP	S24A_HUMAN
475	GYQNTTPPGATGVPPS	
476	LGSGLPPPGMPPPGSF	S3B4_HUMAN
477	PPPGMPPPGSFPPVP	
478	FPPPVPPPGALPPGIP	
479	PPPGALPPGIPAMPFP	
480	MPPPPMPPGAAGHGFP	
481	GHPHAGPPGSGGQPPP	
482	QPPPRPPPGMPHPGPP	
483	HDFRSPPPGMLNQR	SFPQ_HUMAN
484	PPTSGAPPGSGPGPTP	
485	PAVTSAPPGAPPPTPP	
486	YCLAPPPPGIDVTTY	SFR8_HUMAN
487	TTTAPPPPGTTPPPPP	
488	PPLGIPPPGFGPGVPP	SRA4_HUMAN
489	FNPMHLPPGFLPPGPP	
490	LIPLQRPPGMPPPHLQ	
491	HCNVTCPPGLHGADCA	SRC2_HUMAN
492	RAPSPPPGSEAAPSP	
493	RDPTPRPPGLPEEATA	
494	NITLGEPPGFLHSWWC	SSB3_HUMAN
495	MPPGGIIPPFFQGPFG	
496	PGFFQPPGSPQSPHA	
497	PPGGGPPGTPIMPSP	
498	ISGISNPPGTPRDDGE	

499	SHRPPPPGHR	Control
500	VMQKRSRAIHSSDEGE	
501	NIpYSVPHDSTQ	Negative Control
502	IQQQQPPPGKKPKPE	SYV2_HUMAN
503	TYDLPTPPGKKDVSG	
504	VSDPAVPPGEDPDGRY	
505	TAPAWPPGEDPGTTP	T13C_HUMAN
506	EDPGTTPPGHSVPVPA	
507	LPVPPPPGEPSPAPP	TED_HUMAN
508	PGEPSAPPGTCGPRYS	
509	ANFKIEPPGLFRGRGN	TOP1_HUMAN
510	AKVSPPPGHKWKVEV	
511	LVCAQCPPGTFVQRPC	TR6B_HUMAN
512	LEHASCPPGAGVIAPG	
513	TQCQCPPPGTFSSASS	
514	SGVEEIPPGIVNKELI	TRIO_HUMAN
515	PGPSLPPPGAAPEAGP	
516	SAPSRPPGADAEGSE	
517	TTLWQCPPGEEPDLDP	TRLT_HUMAN
518	TLCRCPPPGTFSSAAG	
519	PGFCICPPGFYGVNCD	WIF1_HUMAN
520	PGKICPPGLEGEQCE	
521	TWERLPPGWKRTPDP	WWP2_HUMAN
522	DPLGPLPPGWKRQDN	
523	IQEPALPPGWEMKYTS	
524	PGAPGMPPIPLMPG	Z207_HUMAN
525	PVMPGMPGMMPMGGM	
526	PLMPGMPGMPPVPR	
527	GLPLGLPPGLMGPGPP	Z409_HUMAN
528	GGPPPPPGATPTSP	
529	HHQRDPPGLVPMLE	ZAP3_HUMAN
530	PESPPVPPGSYMPSPQ	
531	IQATTPPPGIPPGVP	
532	RPGMYPPPGSYRPPPP	
533	PPPMGKPPGSIVRPSA	
534	SHRPPPPGHR	Control
535	-	-
536	-	-
537	-	-
538	-	-
539	-	-
540	-	-
541	-	-
542	-	-
543	-	-
544	-	-
545	-	-
546	-	-
547	-	-
548	-	-
549	-	-
550	-	-

PPGW		
1	SHRPPPPGHR	Control
2	SQAPSHRPPPPGHRVQ	
3	ATSQHPPPPPGHRSQA	
4	VMQKRSRAIHSSDEGE	
5	NIzSVPHDSTQ	Negative Control
6	HAMVAKPPGWSAVA	AAH07078
7	HAMVAKPPGWSAVA	AAH08386
8	MADQVLPPGWQEEQAI	AAH14093
9	PSELTCPPGWEWEDDA	AAH52617
10	GSPGGPPPGWVRDPR	AAK83389
11	CVGMSCPPGWGHLDAT	AAL11095
12	DELGPLPPGWVVRSTV	AAM90910
13	SQTVILLPPGWQSYLSP	AAP35537
14	LLWALRPPGWLLQWHC	AAP35670
15	QTDDPLPPGWKRVS	ABB2_HUMAN
16	EVEAGLPPGWRKIHDA	ABB3_HUMAN
17	EWGLDTPPGWPAAEPA	ABD4_HUMAN
18	MADQVLPPGWQEEQAI	ABP_HUMAN
19	TTRGMTPPGWLSYILP	AD29_HUMAN
20	VPDSEAPPGWDRADSG	BAA20769
21	CVGMSCPPGWGHLDAT	BAB69487

22	EVEAGLPPGWRKIHDA	BAC22578	97	NDLGPLPPGWEERIHL	
23	GDRDPLPPGWEIKIDP	BAG3_HUMAN	98	HAMVAKPPGWSAVA	Q8WUX5
24	CVGMSCPPGWGHLDAT	CAC83682	99	PLAWQNPPGWQTPPGW	Q8WY92
25	CVGMSCPPGWGHLDAT	CAD12729	100	PPGWQTPPGWQTPPGW	
26	PYQCDCPPGWTGSRCH	CAD97901	101	PPGWQTPPGWQGPPDW	
27	PYQCDCPPGWTGSRCH	CAD97988	102	HTDSEGGPPGWKDPSP	Q8WY94
28	SQTVILPPGWSYLSL	GAS7_HUMAN	103	ELEPEEPPGWRELVP	Q92888
29	TFRACPPGWKGSTCA	JAG2_HUMAN	104	ELEPEEPPGWRELVP	Q96BF4
30	PLAWQNPPGWQTPPGW	MGD1_HUMAN	105	SHRPPPPGHR	Control
31	PPGWQTPPGWQTPPGW		106	VMQKRSRAIHSSDEGE	
32	PPGWQTPPGWQGPPDW	MGD1_HUMAN	107	NIzSVPHDSTQ	Negative Control
33	PSELTCPPGWEWEDDA	MYOF_HUMAN	108	EVEAGLPPGWRKIHDA	Q96DX9
34	SHRPPPPGHR	Control	109	KWGLDTPPGWPAEPA	Q96E75
35	VMQKRSRAIHSSDEGE		110	ELEPEEPPGWRELVP	Q96F17
36	NIzSVPHDSTQ	Negative Control	111	VTQAPLPPGWEQRVDQ	Q96F66
37	PTQVPVPPGWNQLPSG	NCO6_HUMAN	112	DRPEPLPPGWERRVDN	
38	QEPSPPLPPGWEERQDI	NED4_HUMAN	113	DPLGPLPPGWEKRTDS	
39	PTSSGLPPGWEEKQDE		114	PWYARNPPGWSQLFLG	Q96GJ1
40	NDLGPLPPGWEERTHT		115	LLWALRPPGWLPQWHC	Q96HI4
41	LLWALRPPGWLPQWHC	NMT1_HUMAN	116	HAMVAKPPGWSAVA	Q96HL5
42	LLWALRPPGWLLQWHC	NMT2_HUMAN	117	VPDSEAPPGWDRADSG	Q96HP1
43	GSPGGPPPGWVRDPRL	NOS3_HUMAN	118	WEPPAVPPGWTVSSY	Q96ID2
44	EYKRCPPPGWSGKSCQ	NTC1_HUMAN	119	PWYARNPPGWSQLFLG	Q96IH9
45	EAACLCPGWSGVCRCQ	NTC3_HUMAN	120	TGECACPPGWTGAVCA	Q96KG6
46	GAYCLCPGWSGRLCD		121	DSEDELPPGWEERTTK	Q96KM3
47	ELEPEEPPGWRELVP	O00513	122	CVGMSCPPGWGHLDAT	Q96L37
48	WEPPAVPPGWTVSSY	O15034	123	SAPFPDPPGWRDIEPE	Q96MJ8
49	TALLSPPPGWGLSPL	O3A4_HUMAN	124	ESGSAPPPGWRGWPWS	Q96NH1
50	LPPPPLPPGWEEKVDN	O43165	125	LPPPPLPPGWEEKVDN	Q96PU5
51	VTQSFLPPGWEIRIAP		126	VTQSFLPPGWEIRIAP	
52	NDLGPLPPGWEERIHL		127	NDLGPLPPGWEERIHL	
53	VTQAPLPPGWEQRVDQ	O43584	128	EVEAGLPPGWRKIHDA	Q96Q18
54	DRPEPLPPGWERRVDN		129	SSGVLLPPGWPGYYKD	Q96QU9
55	DPLGPLPPGWEKRTDS		130	DSEDELPPGWEERTTK	Q96RF2
56	PPEPARPPGWARREG	O60432	131	SSGVLLPPGWPGYYKD	Q96RM4
57	STPARWPPGWLPPCS	O76032	132	VTPRTRPPGWEDYWTA	Q96RZ4
58	CNQFDCPPGWHIE	P82987	133	YNGSYVPPGWKEWVGL	Q96SG2
59	ADEKLLPPGWEKRMSR	PIN1_HUMAN	134	MRQLGYPPGWLKEAEL	Q96SK7
60	ADEKLLPPGWEKRMSR	PINL_HUMAN	135	RVRRALPPGWTQQAEL	Q96T57
61	YNGSYIPPGWELGL	Q86YV8	136	WESKPPPPGWRPKGLL	Q99570
62	EVEAGLPPGWRKIHDA	Q86Z13	137	ELEPEEPPGWRELVP	Q9BSB1
63	LSVIKSPPGWEVGVYA	Q8IV01	138	SAPFPDPPGWRDIEPE	Q9BSE2
64	AGSPVPPGWNPNSSS	Q8IYB2	139	DSEDELPPGWEERTTK	Q9BT88
65	RGCPVSPPGWELSPSP	Q8IYL2	140	GTRPSPPGWRLRLTG	Q9BUS0
66	RKYGGPPPGWVGSPPP	Q8IYX4	141	VPDSEAPPGWDRADSG	Q9BV84
67	PLAWQNPPGWQTPPGW	Q8IZ84	142	LPPPPLPPGWEEKVDN	Q9BW58
68	PPGWQTPPGWQTPPGW		143	VTQSFLPPGWEIRIAP	
69	PPGWQTPPGWQGPPDW		144	NDLGPLPPGWEERIHL	
70	MRQLGYPPGWLKEAEL	Q8N2K5	145	VTQAPLPPGWEQRVDQ	Q9BY75
71	VPDSEAPPGWDRADSG	Q8N347	146	DRPEPLPPGWERRVDN	
72	TDELPLPPGWEFTFTA	Q8N3P2	147	DPLGPLPPGWEKRTDS	
73	ELEPEEPPGWRELVP	Q8N4J4	148	EVEAGLPPGWRKIHDA	Q9BYD4
74	LPPPPLPPGWEEKVDN	Q8N5A7	149	TDELPLPPGWEFTFTA	Q9GZV5
75	VTQSFLPPGWEIRIAP		150	LPPPPLPPGWEEKVDN	Q9H2W4
76	NDLGPLPPGWEERIHL		151	VTQSFLPPGWEIRIAP	
77	QGSCSCPPGWMGTICS	Q8N780	152	NDLGPLPPGWEERIHL	
78	LSLPLPPGWALFAVL	Q8N819	153	ETREKEPPGWQGGQGE	Q9H2Y3
79	YPCMPPPPGWMPVPGST	Q8N9P2	154	ETREKEPPGWQGGQGE	Q9H3B3
80	RGCPVSPPGWELSPSP	Q8NA95	155	TRPQGVPPGWPELALS	Q9H407
81	LSRGLSPPGWTGRSL	Q8NAQ8	156	VTQAPLPPGWEQRVDQ	Q9H451
82	EVLVLPVPPGWQDPEV	Q8NAY9	157	DRPEPLPPGWERRVDN	
83	PEKENRPPGWERTRKR	Q8NBI3	158	DPLGPLPPGWEKRTDS	
84	PYQCDCPPGWTGSRCH	Q8NBT9	159	SEDPLPPGWSVDWTM	Q9H4B6
85	LGNLGIPPGWFSGLGG	Q8ND23	160	LEREGLPPGWERVESS	
86	SGEAAGPPGWQGCPE	Q8NDF7	161	GSCWLCPPGWSYIQS	Q9H5G4
87	ADEKLLPPGWEKRMSR	Q8NFL2	162	LWHLCHPPGWKWN	Q9H8T2
88	RKYGGPPPGWEGPHFQ	Q8NI52	163	SEDPLPPGWSVDWTM	Q9H949
89	SGEAAGPPGWQGCPE	Q8TBE0	164	LEREGLPPGWERVESS	
90	RKFGGPPPGWEGPPPP	Q8TBY0	165	PWYARNPPGWSQLFLG	Q9H9K2
91	GPPGRGPPGWRRREEL	Q8TC11	166	SEDPLPPGWSVDWTM	Q9HAK9
92	PLAWQNPPGWQTPPGW	Q8TEN0	167	LEREGLPPGWERVESS	
93	PPGWQTPPGWQTPPGW		168	ETREKEPPGWQGGQGE	Q9HAW0
94	PPGWQTPPGWQGPPDW		169	MADQVLPVPPGWQEEQAI	Q9HBM7
95	LPPPPLPPGWEEKVDN	Q8WUU9	170	DSEDELPPGWEERTTK	Q9NPC9
96	VTQSFLPPGWEIRIAP		171	RKYGGPPPGWDAAPPE	Q9NQ93

172	RKYGGPPPWWDAAPPE	Q9NQ94	199	HSPSQLPPGWITIRSTF	Q9Y2Y4
173	RKYGGPPPWWDAAPPE	Q9NQX8	200	ITGPGSPPGWATLQIQ	Q9Y405
174	RKYGGPPPWWDAAPPE	Q9NQX9	201	DELGPLPPGWVVRSTV	SUF1_HUMAN
175	DSEDELPPGWEERTTK	Q9NRF4	202	EELGPLPPGWEIRNTA	SUF2_HUMAN
176	DSEDELPPGWEERTTK	Q9NRF5	203	DQRTLPPGWVSLGRA	TPP1_HUMAN
177	DSEDELPPGWEERTTK	Q9NRF6	204	ERPQLPPGWERRVDD	WWP1_HUMAN
178	MRQLGYPPGWLKEAEL	Q9NSS2	205	DPYGPLPPGWEKRVDS	
179	MRQLGYPPGWLKEAEL	Q9NSS3	206	TWERPLPPGWEKRTDP	WWP2_HUMAN
180	LPPPPLPPGWEEKVDN	Q9NT88	207	DPLGPLPPGWEKRDND	
181	VTQSFLPPGWEMRIAP		208	IQEPALPPGWEMKYTS	
182	NDLGPLPPGWEERIHL		209	VPDSEAPPGWDRADSG	Y310_HUMAN
183	GPPGRGPPGWRREEL	Q9NTV3	210	SHRPPPPGHR	Control
184	ETREKEPPGWQGQGE	Q9NUY6	211	VMQKRSRAIHSSDEGE	
185	SHRPPPPGHR	Control	212	NIzSVPHDSTQ	Negative Control
186	VMQKRSRAIHSSDEGE	Control	213	-	-
187	NIzSVPHDSTQ	Negative Control	214	-	-
188	RKYGGPPPWEGPHFQ	Q9NXG3	215	-	-
189	DSEDELPPGWEERTTK	Q9NZC5	216	-	-
190	DSEDELPPGWEERTTK	Q9NZC7	217	-	-
191	RKYGGPPPWWDAAPPE	Q9NZD3	218	-	-
192	ARHRSHPPGWASGARF	Q9P0U7	219	-	-
193	MDCPALPPGWKKEEVI	Q9UBB5	220	-	-
194	MDCPALPPGWKKEEVI	Q9UIS8	221	-	-
195	YNGSYVPPGWKEWVGL	Q9ULH3	222	-	-
196	CNQFDCPPGWHIIEWQ	Q9ULI7	223	-	-
197	YNGSYIPPGWREWLGL	Q9UPS5	224	-	-
198	SGEAAGPPGWQGCPE	Q9Y2F4	225	-	-

Table 12.3: Viral peptides synthesized on the membrane depicted in Fig. 8.6
List of peptides, synthesized on the membrane, depicted in Fig. 8.6. Columns are as in Table 12.2.

SPOT-number	Sequence	Accession Number/Description			
PPG[AEFHILMSTVWY]					
1	SHRPPPPGHRV	Control	37	FFIGLVPPGYKYLPGP	COAT_MEVA
2	SHRPPPPGHRV		38	MVPPPGYKYLPGP	COAT_MUMIM
3	-	-	39	SIPMSHPPGTIFIKLA	COAT_PAVBO
4	-	-	40	LAALIVPPGIEPVESF	COAT_SMSV1
5	-	-	41	TFSLKPPGSLKKGHS	
6	-	-	42	LAALLVPPGVEPIESV	COAT_SMSV4
7	-	-	43	TFALLKPPGSLIKHGS	
8	-	-	44	IIVCCVPPGFTSSSLT	COAT_SOUV3
9	-	-	45	ISQPSTPPGTDINLWE	
10	-	-	46	LAPPVFPPGFGEALVY	
11	-	-	47	PPGPPGPPGLPGLFVT	COLL_HSVSC
12	-	-	48	PTTTPVPPGYLIQHEE	CORA_HPBDU
13	-	-	49	LCCLSCPPGTYASRLC	CRMB_CAMPS
14	-	-	50	IFPNGKPPGSNQPNPQ	DNBI_HSV11
15	-	-	51	LFPNGKPPGSDNPNPQ	DNBI_HSVB2
16	-	-	52	LFRGHPPGIDTPNPQ	DNBI_HSVEB
17	-	-	53	EDHQPNPPGEGKFPPL	DPOL_ADE02
18	-	-	54	YVLIAPPPGSSKNVPN	DPOL_GPCMV
19	-	-	55	LKMQGVPPGFGRVIQR	DPOL_RHCM6
20	-	-	56	AYDYTIPPGERQLIKT	DUT_VACCC
21	HPVHAGPIAPGQMREP	HIV I GAG-protein (trans)	57	DGEPDVPPGAIEQGPA	EBN1_EBV
22	HPVAAGPIAPGQMREP		58	AAPAQPPPGVINDQQL	EBN2_EBV
23	HPVAMGPIAPGQMREP	HIV I GAG-protein (cis)	59	LPFGCNPPGSIDVSCY	ENV_AVISN
24	HPPAMGPLPPGQIREP		60	LTRLCPPPGHVFCGN	
25	KKHQKEPPFLWGMGYEL	HIV-Po1	61	VAMVTSPPGYRIVNDT	ENV_BIV06
26	DPTKAGPPGGLRKPV	ABL_MLVAB	62	RPPQPPPGTASIVPE	ENV_FR5FB
27	PQSTAKPPGTPTSPVS		63	RFRYCAPPGFALLRCN	ENV_HV2BE
28	RIRPFHPPGSPWANRP	BRL1_EBV	64	RPVFSPPGYLQQIHI	
29	SEFDLLPPGSRIVECN	COAT_DSDNV	65	RFRYCAPPGFALLRCN	ENV_HV2CA
30	LAAIVVPPGIDPVQST	COAT_FCVC6	66	KFRYCAPPGFALLRCN	ENV_HV2D1
31	KFHLLKPPGSMITHGS		67	RFRYCAPPGFALLRCN	ENV_HV2D2
32	LAAIVVPPGVDPVQST	COAT_FCVF4	68	KFRYCAPPGYALLRCN	ENV_HV2G1
33	KFHLLKPPGVSVLTHGS		69	RFRYCAPPGLCLLRCN	ENV_HV2KR
34	ARRGLVPPGYKYLPGP	COAT_FPV	70	RPVFSPPGYIQQIHI	
35	SEFDLLPPGSRVVECN	COAT_GMDNV	71	RFRYCAPPGYALLRCN	ENV_HV2RO
36	QLVNYEPPGAFDPI SN	COAT_IRV16	72	RFRYCAPPGFVLLRCN	ENV_HV2SB
			73	RPPQPPPGGAASIVPE	ENV_MCFB
			74	RCRYCAPPGYALLRCN	ENV_SIVM1
			75	RPLQPPPGGAASIVPE	ENV2_FR5FV
			76	RLRVCIPPGYFGRFLA	EXXK_ADE02

77	NGLQEKPPGVLSLKYT	FIB1_ADE40	152	-	
78	DGLQENPPGVLALKYT	FIB2_ADE40	153	-	
79	DGLQEKPPGVLALKYT	FIB2_ADE41	154	-	
80	NGFQESPPGVLSLRVS	FIBP_ADE02	155	-	
81	NGFQESPPGVLSLRSL	FIBP_ADE05	156	-	
82	NGFQNFPPGVLSLKLA	FIBP_ADE08	157	-	
83	DGFQNFPPGVLSLKLA	FIBP_ADE09	158	-	
84	NGLQEKPPGVLALNYK	FIBP_ADE12	159	-	
85	NAFQEKPPGVLSLNYK	FIBP_ADE31	160	-	
86	QGLTESPPGTLAVNVS	FIBP_ADECT	161	-	
87	CFPILHPPGAPSAHRP	GAG_HTLV2	162	-	
88	FPVAQAPPGLIPTAPP	GAG_HV2G1	163	-	
89	MAGLDPPPFPFPPSKH	GAG_JSRV	164	-	
90	AWRAIPPPGVKKTVLA	GAG_MMTVB	165	-	
91	KGSKRAPPGLCPRCKK		166	-	
92	GQGGDTPPGAEQSRAE	GAG_RSVP	167	-	
93	DKQAQFPPGLLTQIQS	GAG_SMRVH	168	-	
94	FRGLTDPGFTGGTTN	HELI_HSVEB	169	-	
95	PIYSFTPPGSGNCSGK	HEMA_MUMP1	170	-	
96	KTRIIINPPGSSRDWVH	HEMA_PI4HA	171	-	
97	VERIINPPGVLDVWAT	HEMA_SV5	172	-	
98	YWSVLTPPGEADDPPLP	HEPA_HSV2H	173	-	
99	NPHWLPPPGFYTGGFE	HEX3_ADE02	174	-	
100	NPHWLPPPGFYTGEFD	HEX3_ADE12	175	-	
101	NKHWTPPPGFYTGDFE	HEX3_ADEM1	176	-	
102	FNPFSGPPGHYPDQFI	HEX8_ADE02	177	-	
103	FQPFSGPPGSYPDEFI	HEX8_ADEB2	178	-	
104	INPFSGPPGTYPDQFI	HEX8_ADEP3	179	-	
105	NQEVLIIPPGIKFTVVT	HLIK_ASFB7	180	-	
106	AATRPAAPPAPRSSSS	ICP0_HSV2H	181	SHRPPPPGHRV	Control
107	PRPRPPPGVGGGGA	ICP3_HSV11	182	SHRPPPPGHRV	
108	PRPRSPPPGAGPGGGA	ICP3_HSV1D	183	-	-
109	GALPPAPPGIRWASAT	ICP4_HSV11	184	-	
110	PGGGLLPPGARILEYL	ICP4_HSVEB	185	-	
111	IPRVMWPPGFGAAETV	ICP4_VZVD	186	-	
112	GKRRHLPPGARAPRAP	IE63_EBV	187	-	
113	RVEPRGPPGAPPSSGN	IRS1_HCMVA	188	-	
114	RDPCRPPGTSSFPFRG	J1L_HCMVA	189	-	
115	ALIPPTPPGTNLILGT	KITH_HSVBH	190	-	
116	MAACVPPGAPRSAS	KITH_HSVE4	191	LLLAYSPPGASVPTSR	POLG_EC05N
117	DMSPAAPPGLLFTLPA	KITH_VZV4	192	LLLAYSPPGASVPKAR	POLG_EC09H
118	FTLPAEPPGTNLVVCT		193	FLLAYAPPGANAPKNR	POLG_EC11G
119	PPCGASPPGIRRRSRD	KR1_HSV11	194	FLLAYSPPGADPPKSR	POLG_EC12T
120	LFAALLPPGSGPSAEA	KR2_PRVN3	195	QTSLVPPPGAPATCGV	
121	RAPRAAPPGANPAALL	MYC_AVIM2	196	FLIAYSPPGAGVPGSR	POLG_EC30B
122	PLGRRGPPGAGPAALL	MYC_AVIME	197	FLIAYTPPGAGKPTSR	POLG_EMCV
123	AIPTRFPPGTVLPQGY	NCAP_CVBF	198	YMVAYIPPGVETPPDT	POLG_FMDV1
124	YCKRTIPPGYKVDQVF	NCAP_IBVG	199	YMVAYIPPGVETPPEP	POLG_FMDVA
125	DAGVNNPPGAEYKWDYD	PEN3_ADEG1	200	YMVAYAPPMEPPKTP	POLG_FMDVO
126	DLEKLSPPGTFQET	PIV2_ADEG1	201	YMVAYVPPGVETPPDT	POLG_FMDVZ
127	IWAQSLPPGTSAQKAE	POL_BAEVM	202	VLATATPPGSVTVPHP	POLG_HCV1
128	STGLPYPPGIKECEHL	POL_BIV06	203	LVGWPKPPGARSLTPC	POLG_HCVBK
129	LLQGHYPPGYPKYKY	POL_SFV1	204	VLATATPPGSVTVSHP	POLG_HCVH
130	FYFEKLPPGAYKELTT	POL1_GFLV	205	LVGWSPPGTKSLEPC	POLG_HCVJ6
131	GYTTSGPPGSMEPYIY	POL2_TRSVR	206	VLATATPPGSVTTPHP	
132	QTNMVIPPGFNPNTAGI	POLG_BOVEV	207	LVGWSPPGTKSLDPC	POLG_HCVJ8
133	YQVMYVPPGAPVPSNQ		208	VLATATPPGTVTTPHS	
134	LQYMYVPPGAPKPTSR	POLG_CXA16	209	LVGWAPPGARSMTPC	POLG_HCVJA
135	LLLSYSPPGAKPPTNR	POLG_CXA21	210	VLATATPPGSITVPHP	
136	DQIMYIPPGAPRPSW		211	LVGWHAPPGARSLTPC	POLG_HCVJT
137	LLLSYSPPGAKPPTTR	POLG_CXA24	212	VAAQLAPPGAASAFVG	POLG_HCVTV
138	YQLMYIPPGAPRPTAW		213	LQYMFVPPGAPKPSR	POLG_HE71B
139	FLIAYSPPGANPPKTR	POLG_CXA9	214	LQYMFVPPGAPKPEP	POLG_HE71M
140	QTGMIVPPGTNPSSSI		215	LILAYTPPGARGPQDR	POLG_HRV14
141	FLLAYSPPGAGVPKNR	POLG_CXB1J	216	VQAMYVPPGAPNPKEW	
142	FLLAYSPPGAGAPTKR	POLG_CXB3N	217	VLLAYTPPGIGKPRSR	POLG_HRV16
143	FLLAYSPPGAGAPDSR	POLG_CXB4E	218	MQYMYVPPGAPIPTTR	
144	FLLAYSPPGAGAPTTR	POLG_CXB5P	219	AVMIHGPPGTGKSITP	
145	DSFYQGPPEAVERAI		220	LLLAYTPPGIDKPTR	POLG_HRV1B
146	IFMTATPPGSVEAFQ	POLG_DEN1S	221	MQYMYVPPGAPIPKTR	
147	IFMTATPPGSRDPFPQ	POLG_DEN26	222	LLLAYTPPGIAEPTTR	POLG_HRV2
148	IFMTATPPGTADAFQ	POLG_DEN3	223	MQYMYVPPGAPVPSNR	
149	IFMTATPPGATDPFPQ	POLG_DEN4	224	AIVIHGPPGAGKSITP	
150	FLLSYAPPGAGAPKTR	POLG_EC01F	225	LLIAYTPPGVGKPKSR	POLG_HRV89
151	-	-	226	LQFMYVPPGAPVPEKR	

227	IFMTATPPGTTDPFPD	POLG_JAEV1	302	IVDPGCPPGVAPSIPV	TEGU_HCMVA
228	IFMTATPPGTSDDPFE	POLG_KUNJM	303	TRRSPEPPGADLAQLF	TEGU_HSV11
229	IYLSATPPGHADPTGS	POLG_MCFA	304	PFKFTGPPGYTIPVHG	TEGU_HSVEB
230	LLVSYAPPGADPPKKR	POLG_POL1M	305	PWQLSPPPGVKANVDA	TEGU_VZVD
231	YQIMYVPPGAPVPEKW		306	GPEPLPPGARPRHRF	TERM_ADE02
232	LLVSYAPPGAEAPKSR	POLG_POL2L	307	GPEPLPPGARPRRRF	TERM_ADE12
233	YQIMYIPPGAPIPGKW		308	NIVSSLPPGSEGYIYV	U120_HSVMG
234	LLVSYAPPGAKAPESR	POLG_POL2W	309	SSVAGDPPGADGPYVT	UL03_HSV2H
235	YQIMYIPPGAPIPGKR		310	KPARDPPPGAGS	UL06_EBV
236	LLVAYAPPGAQPPTS	POLG_POL32	311	DGVVQVPPGLLNGPLR	UL07_VZVD
237	YQIMYIPPGAPTPKSW		312	TPTPTGPPGAPAAPLS	UL14_HSV11
238	ILVAYAPPGAQPPTS	POLG_POL3L	313	GSLYPRPPGSLAKHP	UL16_HCMVA
239	LKVSATPPGHEVDFKT	POLG_PPVD	314	PLAPPGPPGTLPDPDS	UL16_HSV11
240	LKVSATPPGHEVEFKT	POLG_PPVNA	315	DLGSLCPPGSRARHLG	
241	LKVSATPPGYEVDFTK	POLG_PPVSK	316	TYDELLPPGTRYGADS	UL17_HSVEB
242	DNFFQGGPPGEVVERAI	POLG_SVDVH	317	SVVCDGPPGSPTDSAR	UL24_HCMVA
243	DNFFQGGPPGEVVGRAI	POLG_SVDVU	318	VLPVVWPPGWNLVLQE	
244	FRIAYTPPGAGKPTTR	POLG_TMEVB	319	FMPLTYPPGTLELRCN	
245	FRIAYTPPGAGKPTTR	POLG_TMEVG	320	LLARTLPPGSGEIVLA	UL24_HSVE1
246	ILMTATPPGTSDEFPH	POLG_YEFV1	321	LLAKTLPPGSGEILLA	UL24_HSVE4
247	ISLVSNPPGVNRVITR	POLN_EEVV3	322	NRQAAYPPTGFADNKI	UL25_EBV
248	TSLVSNPPGVNRVITR		323	GGDGGAPPGLAVAEME	UL25_HSV11
249	TSLVSTPPGVNRVITR	POLN_EEVVP	324	MATSPPGVLASVAV	UL32_HSV11
250	PPEVLLPPGTYRTASY	POLN_HEVBU	325	AAKDLPPPGYRVGRRG	UL41_HCMVA
251	PPEVLLPPGTYRTSSY	POLN_HEVME	326	VGVLLCPPGSTGGRSG	UL43_HSV11
252	SSTAPLPPGTYEPAYL	POLN_LORDV	327	CLEVELPPGERCAGCR	UL49_EBV
253	NPMVVDPPGTTGPTTS	POLN_MANCV	328	PAAQAHPPGEAGGGFS	
254	I IASVIPPGVDPSSIR		329	PPRPRAPPGANAVASG	UL49_HSVBC
255	LVRVAVIPPGIEIGPGL	POLN_RHDV	330	DSPKRAPPGAGAIASG	UL49_VZVD
256	AGARPRPPGHRRRARG	POLN_RUBVT	331	LPFGDAPPGFDDPRNF	UL52_PRVKA
257	VHSFYRPPPGTQTSVKV	POLN_SINDO	332	STIPSNPPGFDELSNF	UL52_VZVD
258	VHSFYRPPGTQTCVKV	POLN_SINDV	333	EIDLGLPPGVQVGDLL	UL71_EBV
259	RVKDDSPPGQVQKWSA	POLN_SOUV3	334	EIEIAQPPGVFVGDIL	UL71_HSVSA
260	VIMMCGPPGIGKTKAA		335	RSRSALPPGVRPDFIF	UL87_HSV6U
261	SSPEPLPPGVYEPAYL		336	KRPCGLPPGVRLVPPA	UNG_PRVIF
262	DEIGLYPPGYLTLQMQ	POLR_ASGVP	337	PCPGGLPPGAPCAIL	US02_HSVBS
263	QYTSDKPPGFYNWHHG	POLS_EEEV	338	GAITRRPPGAHPGARC	US15_HCMVA
264	FILAKCPPGEFLQVSI	POLS_SFV	339	GTVIYVPPGIQETRLA	
265	EGRYRYPGGVYLTYS	PRTP_HSV11	340	SLPISAPPGWRLDFVE	US26_HCMVA
266	HVFISAPPGLYAVSEL	PRTP_HSVB2	341	PPPSVAPPGEKKELPA	US29_HCMVA
267	PLFGTPPPPTDFPLAL	RIR2_HSVBC	342	PRSACAPPGLMARVR	V120_HSV11
268	EDTIKIPPGIANSQNA	RPO1_FOWPV	343	YIWPAPPPGSLPGAS	V18K_MLVAB
269	SEYVEGPPGSGKTFHL	RPOA_EAV	344	LRPQLKPPGLPKPQPI	V51K_BWYVF
270	SKFIVGPPGSGKTTWL	RPOA_LELV	345	LTPQLKPPGLPKPQPI	V51K_BWYVG
271	SEYIVCPPGTDQEAIS	RRP2_THOGV	346	QCCNRCPPGEFAKVC	VA53_VACCC
272	STRGPLPPGTNLSGSE	RRP3_THOGV	347	AAPNRDPPGYRYAAM	VCAP_HSV11
273	VTFVMGPPGTGKTTFV	RRPB_BEV	348	EYQFKRPPGSTEMTQD	VCAP_VZVD
274	YCTVQGGPPGTGSHLA	RRPB_CVMA5	349	TETSTVPPGTAVLLPA	VCOM_ADEB2
275	KAAARAPPGEQFKHLI		350	KSPCAKPPGVHREQRV	VE1_HPV70
276	KAAARAPPGEQFKHLV	RRPB_CVMJH	351	LKHVPLPPGMNISGFT	VE2_BPV1
277	RTTVQGGPPGSGKSHFA	RRPB_IBVB	352	LSTVKVPPGIQVILGH	VE2_HPV03
278	PVNSKAPPGEQFNHLR		353	PVTSTPPGSPGGQAD	VE2_HPV05
279	EGQRDPDPPGEFLNRVK	RRPL_EBOSM	354	PVTSTPPGSPGGQAD	VE2_HPV08
280	LGNSDRPPGLDLNQSN		355	LNVVKVPPIQVILGY	VE2_HPV10
281	KLYDLLPPGELRKAIC	RRPL_MABVP	356	PVTSTPPGSPGQRDP	VE2_HPV12
282	HCDIEIPPGSNQSLLD	RRPL_NDVB	357	IKIMKLPVGVVDSLGY	VE2_HPV15
283	DDYTKLPPGLIESVVM	RRPO_NMV	358	IQKMKLPPGVVDSLGH	VE2_HPV17
284	RTTVRGGPPGFKNPFTQ	RRPO_P1AMV	359	LANVKIPPGMQAILGH	VE2_HPV29
285	EVIKTAPPGSFVYRAL	RRPO_PMMVJ	360	LSTVKLPPGIKSCIGY	VE2_HPV32
286	DEMQLYPPGYFDLVVS	RRPO_PVMR	361	LKTMKLPVGVVDSLGH	VE2_HPV37
287	DDYSKLPPGYIEALIC	RRPO_PVX	362	PVTSTPPGSPGGQTD	VE2_HPV47
288	DDYSKLPPGYIEALVS	RRPO_PVXCP	363	PVTSTPPGSPGQRQAD	VE2_HPV5B
289	DDYSKLPPGYIEALVC	RRPO_PVXX3	364	IDHQVVPVPGTTSKAKA	VE2_HPV70
290	EVHKTAPPGSFVYKCI	RRPO_TMOB	365	LQQVPLPPGMSAHGVT	VE2_PAPVD
291	EVHKTAPPGSFVYKSL	RRPO_TMV	366	LKRVPPLPPGMRAQALT	VE2_PAPVE
292	LGKGSIPPGVTAULTS	RRPP_PI2H	367	TPAAAAPPGVKPEHG	VG02_HSVI1
293	LGKNTIPPGVTGLLTN	RRPP_SV5	368	LPKRDPVPPGVPTDEML	VG09_VACCC
294	YRAGAPPGEAAAAAQ	SPLR_NPVOP	369	IRKCCDPPGIGFPNPF	VG11_HSVI1
295	KVSQIFPPGIITMNNY	TALA_BFDV	370	SGSRSGPPGTVTSLYV	VG11_HSVSA
296	KRTQIFPPGLVTMNEY	TALA_POVBA	371	ALECTIPPGSMEIFIL	
297	KVTQIFPPGIIVTCNEY	TALA_POVBO	372	MIPPGIPVVQLS	VG17_HSVI1
298	KRTQVFPVPPGIIVTMNEY	TALA_POVJC	373	DFPWFPPGVEIPWET	VG27_BPMD2
299	KKTQIFPPGIIVTSNEY	TALA_POVMK	374	AQPEPPPPGTSAPTLE	VG28_HSVI1
300	KRTQIFPPGIIVTMNEF	TALA_SV40	375	KFGKTVPPGEGLRAFNF	VG39_HSVI1
301	HQKMNSPPGIPIPPPP	TAMI_POVHA	376	DVPEGRPPGFYEFRA	VG42_BPMD2

377	NLLYAIPPGSTIPGMR	VG59_HSV11	414	AQAQPPPPGTQAPEAH	VP40_EBV
378	KSMETVPPGAYSEVFL	VG63_HSV11	415	VPAATAPPGATVAGAS	VP40_HCMVA
379	DLPLDLPPGAYEEDL	VG65_HSV11	416	PESTDIPPGSIAAAPQ	VP40_HSV11
380	DLPRDLPPGAYEEDL		417	PGYGFPPPGLESQIMA	VP40_HSVBC
381	PTTAVIPPGTHSVVPA	VG72_HSV11	418	PYVPLPPPGAMPFAPP	VP40_HSV2
382	CILEAYPPGAGPVSAL	VG75_HSV11	419	LVRVDEPPGAEFLFP	VP40_SCMVC
383	PNPTPPPPGASANASV	VGLB_HSV11	420	TGGYGCPGPHFGGPGY	VP40_VZVD
384	GGLESGPPGAPGLHRR	VGLB_MCMVS	421	GVFGPLPPGTVGLLLG	VPRT_JSRV
385	IVRHFYPPGSVYVSWR	VGLC_HSVMB	422	GPPPPPPGLV	VPX_HV2BE
386	LDQLTDPGVRVYHI	VGLD_HSV11	423	GPPPPPPGLA	VPX_HV2D2
387	PDRLTDPGVRVYHI	VGLD_HSV1A	424	PGPPPPPPGLV	VPX_HV2KR
388	LDQLTDPGVRVYHI	VGLD_HSV2	425	GRPGRVPPGLD	VPX_SIVA1
389	TCRCADPPGIISQNYG	VGLF_NDVA	426	GRAGRVPGLD	VPX_SIVAG
390	TCRCVNPPGIISQNYG	VGLF_NDVB	427	GGAPPPPPGLA	VPX_SIVAI
391	TCRSADPPGIISQNYG	VGLF_NDVU	428	GRANRVPPGLE	VPX_SIVAT
392	HGPADAPPSPAPPPP	VGLG_HSV2H	429	PVGPVFPFGMNWTDLI	VS06_ROTBR
393	PIRPTLPPGILGPLAP		430	PVGPVFPFGMNWTELI	VS06_ROT1
394	TDFFPCPPGTTIQTAV	VGLG_SIGMA	431	EESPTGPPGSIRTWFQ	VSGP_EBOSB
395	DPADENPPGALPGPPG	VGLH_HSV11	432	LCCTSCPPGSYASRLC	VT2_MYXVL
396	GDPKPQPPGVNHEPPS	VGLI_HSV11	433	LFYHCEPPGSVAVLYPF	VTER_HSV11
397	RPAPGSPGPIPEYAE	VGLM_HSV11	434	FKNHRFPFGHLWTMQL	VU1_HSV6U
398	LATLATPPGALLLAL	VGLM_HSVBC	435	TRMEFMPGTPQNLTI	VU54_HSV6U
399	HDAITPPGIMTPIAI	VHS_HSVBC	436	LGKGSVPPGITAVLTN	VV_SV41
400	SEAISTPPGVLTPIAI	VHS_PRVKA	437	LNYGGVPPGHVMCPR	Y054_NPVAC
401	PSIISTPPGVLTPIAV	VHS_VZVD	438	LSYGGAPPGLMCPPR	Y054_NPVOP
402	CVEDKPPPGSCPIEL	VL1_HP14	439	MDYFGAPPGARPAI	
403	CADNPPPGSCPIEL	VL1_HP21	440	NVPLIEPPGEIVTEGN	Y119_NPVOP
404	EAYYLKPPGEMELKMP	VL1_PAPVD	441	ASIHPIPPGLPIDGSV	YAL4_ICMV
405	FTIPTIPPGLGLRIYV	VL2_HP04	442	FANELLPFGSITTPK	YBL2_SFV1
406	MIMPTIPPVALKLF	VL2_HP60	443	LRLCKWPPGTNYSTPG	YG36_BPMV4
407	FSIPTIPPGLGLRIYV	VL2_HP65	444	QTRRLPPGWQRTAP	YHL1_EBV
408	RASGSPPGAGRSTAK	VMAT_MEASY	445	AQRGHPPPGAGQRP	YHL1_EBV
409	NKLISRPPGLVEPIHM	VNCS_AEDEB	446	TVAQSFPPGELALRDE	YHL4_HCMVA
410	RIFDRMPPGFQPSKHL	VP10_RDVA	447	QTVVWTPPGSTSSSSV	YOR3_SOUV3
411	RVAVLVPPGWENDNLS	VP18_NPVOP	448	NLAIYIPPGSDFDYIF	YORM_TTV1
412	LDGTDAPPGALTPND	VP19_HSV11	449	SHRPPPPGHRV	Control
413	LGVAPLPPGAFIQNTG	VP23_HSVBC	450	SHRPPPPGHRV	

Table 12.4: Peptides synthesized on membranes shown in Fig. 9.3

List of peptides, synthesized on the membranes, depicted in Fig. 9.3. Columns are as in Table 12.2. Peptides on different membranes are separated by rows, indicating the GST-GYF domain fusion constructs used for incubation and the motif, applied for the database search. Note that the peptide construct for the relaxed consensus sequence of PERQ2 is identical to the membrane shown in Fig. 8.3, incubated with CD2BP2-GYF GST-fusion protein. Sequences and identifiers or descriptions of these peptides are listed in Table 12.2 and are omitted here. Peptides with identifiers in italicized letters were synthesized onto the membranes for other reasons and are stated here just for completeness.

SPOT-number	Sequence	Accession Number/Description
PERQ2		
PPG[AEFHILMSTWY] x (0,40) PPG[AEFHILMSTWY]		
-Sequences listed in Table 12.2-		
PERQ2		
PPGL		
1	SHRPPPPGHR	Control
2	SQAPSHRPPPPGHRVQ	
3	ATSQHPPPPPGHRSQA	
4	VMQKRSRAIHSSDEGE	
5	NIpYSVPHDSTQ	Negative Control
6	SITSPPLSPALPKYKL	075137
7	PILQEPLPLALVVF	
8	ERWRPHSPDGRSAGW	
9	VQKEPIPEEQEMDFRP	
10	LLILPPVPNPSPTLR	
11	VFPSPGAPPPHMGEL	
12	PQQQQQPPPPQPPQP	
13	VASPPSPAMPKYKLA	Q6Y7W9:
14	GSITSPPPSPALPKYK	
15	SHRPPPPGHR	Control
16	SQAPSHRPPPPGHRVQ	
17	ATSQHPPPPPGHRSQA	
18	VMQKRSRAIHSSDEGE	
19	NIpYSVPHDSTQ	Negative Control
20	KGVCPEPPGLDDPLAQ	AA2A_HUMAN
21	YLDKAPPPLPAETIK	AAB50213
22	GSGPQPPPLVYPCGA	AAH06132
23	MLVIPPGLSEEEEA	AAH25235
24	QPPLNCPGLEYSQI	AAH32718
25	SMDRSIPLGLVNLAL	AAH33634
26	HDHSPHPPGLQPASSA	AAH36093
27	PPGPPPPGLPPSGVP	AAH38224
28	AHNKALPPGLSKEQAP	AAH40207
29	ARYGVEPPGLIKLEKE	AAH40470
30	PPPPSPPLPLPLPP	AAH52968
31	PENSMPPGLSTPTAS	AAH52983

32	DSAMHIPPGLKPHPER	AAK2_HUMAN	107	GAMDGAPPGLGAPLGA	NK24_HUMAN
33	MGGQQAPPGLGPILED	AAM20739	108	LSPPPPPPGLYFSPSA	NK61_HUMAN
34	ELAGEMPPGLNFDLDA	AAP35525	109	GPRCACPPGLSGPSCR	NTC3_HUMAN
35	SGVPRPPGLEEEELTL	AAP35630	110	TFHCLCPPGLEQLCE	NTC4_HUMAN
36	EEYAWVPPGLKPEQVY	AAP36091	111	TKVAVTPPGLAREDWK	NUAM_HUMAN
37	AGPPPAPPGLPAGADC	AAP36093	112	IQRGQWPPGLPGPSTY	O00443
38	KLLDRPPPGLQRPEDR	AAP41133	113	SPPPQIPPGLRPRFCA	O15446
39	AGPPPAPPGLPAGADC	AAP44001	114	GSLQPRPPGLLSDPST	O43263
40	ETLSSPPPGLGKADR	AAP46636	115	SHRPPPPGHR	Control
41	YQDRVAPPGLTQIPQI	ATNB_HUMAN	116	VMQKRSRAIHSSDEGE	
42	VPSWPPPPGLGPFLLL	BAA74450	117	NIpYSVPHDSTQ	Negative Control
43	LNPQGPPGLGDPGSL	BAC06168	118	GSLQPLPPGLKRFSC	O60448
44	YKRGNFPPGLLVIAPG	BAC65211	119	FPGPIGPPGLKGRGA	O60505
45	ELPSSPPPGLPEVAD	BAC77376	120	CNPAPWPPGLAPHLTH	O60623
46	RPPPEERPPGLPLPPPP	BAT2_HUMAN	121	PSSPAQPPGLTQSQNL	O75359
47	PDLYDVPPGLRRPGPG	BCA1_HUMAN	122	VVPAAPPGLPPEGAE	O75808
48	PVSTAMPPLAKSSSE	BRD2_HUMAN	123	GTAQPPPPGLQPHAEF	O76022
49	VALLCGPPGLGKTTLA	CAB53056	124	RAVPQGPPGLPPRPPL	O95364
50	KFLVRWPPGLAEVLS	CABI_HUMAN	125	GDQDGGPPGLGRVIGE	O95714
51	MAPQVHPPGLALNAVG	CAD92588	126	DAHLGLPPGLAKKSSS	O95785
52	RSPSSPPGLEEPLDG	CCAI_HUMAN	127	GLSQSGPPGLLPSPSF	P121_HUMAN
53	PGELGQPPGLYPSSTP	CCB1_HUMAN	128	WEHRSPPPGLSKFELC	P285_HUMAN
54	YLDKAPPPGLPAETIK	CDK4_HUMAN	129	TALPTAPPGLLGTPIA	PCB4_HUMAN
55	SWSGLPPPGLSPPSRP	CG1_HUMAN	130	PASPGPPPGLAAYTAK	
56	SHRPPPPGHR	Control	131	ETLSSPPPGLGKADR	PCN2_HUMAN
57	VMQKRSRAIHSSDEGE		132	TWAGKPPPGHLHDVVK	PPR8_HUMAN
58	NIpYSVPHDSTQ	Negative Control	133	DPPPPPPPPGLPCSGAL	PRDD_HUMAN
59	QLRISFPPGLCWGDRM	CHD3_HUMAN	134	YLQARRPPGLECYNP	Q02063
60	QRPGRPPGLPARPEA	CLR3_HUMAN	135	QPRHLAPPGLHPVPGG	Q12996
61	ICVQWPPGLAEQHG	CLR3_HUMAN	136	GAPTQYPPGLGPPPPM	Q15182
62	RLRRSLPPGLLRRVSS	CN3A_HUMAN	137	GMPVTI PPGLTREQER	Q15913
63	RSTMSLPPGLLGNSWG	DF5L_HUMAN	138	GNFKIEPPGLFRGRGD	Q86V82
64	QLMAPTPPGLRNSLNR	DOC6_HUMAN	139	ARDPMRPPGLVRNLQV	Q86VF2
65	NNASASPPGLGAQPLP	DRPL_HUMAN	140	KKVRKVPGLPSSVYA	Q86VM2
66	LALQPGPPGLHPPFFH		141	ELPSSPPGLPEVADP	Q86XP8
67	GPAPTPPPPGLSYSGSF	EGR4_HUMAN	142	GVSQEGPPGLPPQPPP	Q86YS8
68	QDLERVPPGLLALDNM	ELM3_HUMAN	143	IDQLEPPGLGARC	Q8IUH1
69	PPPPSPPGLLPLLPP	EPB3_HUMAN	144	PVTPLRPPGLGSASLH	Q8IVH2
70	YLQARRPPGLEICYNP	FGR1_HUMAN	145	PPGSEPPGLTQLSPG	Q8IVL6
71	FLRARRPPGLDYSFDT	FGR3_HUMAN	146	PSENSMPPGLSTPTAS	Q8IVS9
72	LSVQNFPGLYCKTSM	FMR2_HUMAN	147	KSKPELPPGLSPEATA	Q8IXJ8
73	APETRGPGLLCDLDA	FXH1_HUMAN	148	SMDRSI PPGLVNGLAL	Q8IY86
74	PLLGCPPPGLSGSGPI	FXN1_HUMAN	149	NGLEVAPPGLITNFSL	Q8N5S7
75	LLTTAPPGLQPSGAGG	FZD2_HUMAN	150	SRLPELPPGLHLPQLK	Q8N6C4
76	PRADPEPPGLAAGLVQ	GAK_HUMAN	151	KKVRKVPGLPSSVYA	Q8NEH3
77	NGLEVAPPGLITNFSL	GP17_HUMAN	152	LPGLRPPPPGLPAAPWL	Q8NET5
78	GLLAAPPGLGRVRLG	GP62_HUMAN	153	TAPSRPPPPGLTQKPP	Q8NEZ0
79	TSWPACPPGLVHTLGN	HAIR_HUMAN	154	RSPSSPPGLEEPLDG	Q8NFX6
80	NLASYLPPGLALRPLE	HAIR_HUMAN	155	ISVRGGPPGLRSARSG	Q8NG09
81	VPPGAGPPGLGGPRPV	HAN2_HUMAN	156	LRFRGAPPGLHALTSR	Q8NGZ7
82	PGEDRTPPGLAAEPEP	HAN2_HUMAN	157	EILKAVPPGLVHLGIC	Q8NI35P
83	KKVRKVPGLPSSVYA	HTF4_HUMAN	158	KRSRVAPPGLSS	Q8NI38
84	QGADFQPPGLYPRPDF	HXD4_HUMAN	159	ELAGEMPPGLNFDLDA	Q8NI97
85	MERPPGLRPGAGG	IKKA_HUMAN	160	GLLAAPPPPGLGRVRLG	Q8TAM0
86	AREGLRPPGLSASQPQ	IPF1_HUMAN	161	RTFTPQPPGLERLWLE	Q8TAY0
87	QLDLHFPGLSFRKVE	ITAL_HUMAN	162	TIRVIAPPGLGTFAFN	Q8WWV91
88	KKVRKVPGLPSSVYA	ITF2_HUMAN	163	VRRDPAPPGLRELCIQ	Q8WWV8
89	DPYRGMPPGLQGSVS		164	DYAYI PPPGLQPEPGY	Q93052
90	SHIQI PPPGLTELLQG	KAP2_HUMAN	165	LGLYPPPPGLTEIPPG	Q96BC6
91	MAEKAPPGLNRKTSR	KCB2_HUMAN	166	GPQCPGPPGLPAQARA	Q96DV1
92	PGEPTPPPGLLFLPSG	KFC1_HUMAN	167	MLVI PPGLSEEEEA	Q96F56
93	ASEAGRPPGLETYGFP	LGR6_HUMAN	168	AQSLVPPPGLPGSSTP	Q96G51
94	SLSWHLPPGLSAKMLS	LH2A_HUMAN	169	GVLPYFPPGLPPPDAG	
95	CQVIPLPPGLPLTHAQ	LMA5_HUMAN	170	PSRTAVPPGLSSLPLT	Q96L91
96	TGRNCPPGLSGERCD		171	QPRHLAPPGLHPVPGG	Q96QD6
97	TKSSAVPPGLPVYLDL	MAPB_HUMAN	172	SHRPPPPGHR	Control
98	LFATQNPPGLYGGRKV	MDN1_HUMAN	173	VMQKRSRAIHSSDEGE	
99	PSENSMPPGLSTPTAS	MICA_HUMAN	174	NIpYSVPHDSTQ	Negative Control
100	GNQGLPPPGLTISNSC	MITF_HUMAN	175	SLCVLPPGLAVSVLK	Q96RK5
101	EEHVLAPPGLQPPHCP	MYF6_HUMAN	176	LEGLPLPPGLKQVHLN	Q96RY2
102	ESPGEPPLGLELFRWQ	NAH5_HUMAN	177	ASGPPAPPGLAAGPGP	Q96S59
103	PNVTIKPPGLTDLEVT	NCO6_HUMAN	178	TSGPSTPPGLVLPHTA	Q96T58
104	VMASPPPPGLPAGSGP	NCR2_HUMAN	179	ESDHEYPPGLLVAFSA	Q9BRQ5
105	QMLAPPPLGLPRLALP	NFC1_HUMAN	180	SFGGGPPGLGGLFQA	Q9BU37
106	MDLELPPPGLPSQQDM	NFL2_HUMAN	181	GTAQPPPPGLQPHAEF	Q9BUJ2

182	PPPPPPPPGLGLGFPM	Q9BWD2	3	QSSQPPPPGLSGSQGD	Q6QTF1
183	PPQKRPPPLSDPWGA	Q9BXM8	4	SVPLPPPPGIPSNSE	
184	NGLKLNPPGLREFPSG	Q9BYX3	5	QPDVHPPPGMLRFPPP	
185	PGPPQAPPGLPGQASL	Q9BZJ5	6	RCPVSAAPPGFVPTPS	Q6RF52
186	FDPAPPPPLGSSRPS	Q9GZM8	7	TPSRPPPPGFSSNGRD	
187	TALPTAPPGLLGTPTYA	Q9GZT1	8	PQGYMPPPGVPQMMAP	Q84VV2
188	PASPGPPGLAAYTAK		9	QNGILRPPGMAPIPGQ	
189	EPRTPGPPGLTTTPAP	Q9H1C2	10	PGQGGPPGMAPIPGQ	
190	GAWGSLPPGLTFQNKL	Q9H2I5	11	GNIPLMPPGLPPPPPP	Q8GUK8
191	GMMGGYPPGLPPLQGP	Q9H2T5	12	QGPTFQPPGIMYAGAP	
192	TALPTAPPGLLGTPTYA	Q9HCU2	13	PPESYPPPGYQSHYPP	Q940Z6
193	PASPGPPGLAAYTAK		14	YQSHYPPPGYPSAPPP	
194	SDTPSPPPLGSKSNPV	Q9NPQ1	15	YPSAPPPPGYPSPPSH	
195	SDTPSPPPLGSKSNPV	Q9NZN6	16	HQEVAVPPGVEVPGA	Q941Q3
196	NYSNWGPPGLGPSMLS	Q9UBG0	17	SAVEPLPPGVKRTSEA	
197	PGELGQPPGLYPSHP	Q9UD79	18	YAPPVYPPGYPPGYPF	Q9CAQ5
198	QQQPPPPGLLVRQNS	Q9UGY9	19	VYPPGYPPGYPFSYPT	
199	LGLYPPPPGLTEIPPG	Q9UHB4	20	LLEEKSPPGIVDKFGW	Q9FND9
200	QVMQTIPPGLFWRFI	Q9UKZ4	21	LVDGGCPPGLVLIDG	
201	EPGIQPPGLPGPPGP	Q9UM16	22	RPQVSAPPGFSAFNRL	Q9LSS9
202	SPPQIPPGLRPRFCA	Q9UPF6	23	APNRLPPPGFSSHERV	
203	GGPPGPPGLPPGPPP	Q9Y2W2	24	SAVEPLPPGVKRTSEG	Q9LW6
204	PPLGPAPPGLFPPAPL		25	RTQVSAPPGFSAFNRL	Q9M1E4
205	SFPFTFPPGLFARYSV	Q9Y4C4	26	APNRLPPPGFSSHQRG	
206	FGPPIPPPLGGGAFG	RBMC_HUMAN	27	NPRSMGPPGFPGIGGP	Q9SGW9
207	PGFGSGPPGLGSAPGH		28	FPGIGGPPGFPPTPFG	
208	GSLQPRPPGLLSDPST	RED1_HUMAN	29	PPPVTTPPGLLPPITT	Q9SXE7
209	KLKQSLPPGLAVKELK	RL38_HUMAN	30	LPPITTPPGLLPPVTT	
210	PSFCNPPGLEALSPN	RON_HUMAN	31	LPPVTTTPPGLLPPVTT	
211	GKMNSGPPGLGGKRKG	RRS1_HUMAN	32	LPPVTTTPPGLLPPVIN	
212	PGMGIPPPGLAPGQIP	RU1A_HUMAN	33	GLMITQPPGMFTVPPG	WRK3_ARATH
213	PPPPPPPPGLGLGFPM	S3B2_HUMAN	34	PGMFTVPPGLSPATLL	
214	LLLSPPPPGLPSLHSL	SIX2_HUMAN	35	-	-
215	MGTPPGLQTDCEA	SNC1_HUMAN	36	-	-
216	KLKEFMPPGLQELIPF	SYS_HUMAN	37	-	-
217	NGLKLNPPGLREFPSG	T2AZ_HUMAN	38	-	-
218	FLREPGPPGLSHQLMS	TAU_HUMAN	39	-	-
219	KKVRKVPGLPSSVYP	TFE2_HUMAN			
220	ANFKIEPPGLFRGRGN	TOP1_HUMAN			
221	LEGFCPPGLYMDERG	VWF_HUMAN			
222	SFGGGGPPGLGGLFQA	WAIP_HUMAN			
223	PPGPPPPGLPSDGDH	WASL_HUMAN			
224	PGKICPPGLEGEQCE	WIF1_HUMAN			
225	HHQRDGGPLVPMLE	ZAP3_HUMAN			
226	MAPQVHPPGLALNAVG	ZEP1_HUMAN			
227	SHRPPPPGHR	Control			
228	VMQKRSRAIHSSDEGE				
229	NIpYSVPHDSTQ	Negative Control			
230	SAPHGPMQKGPKEPI	075420			
231	RVPFAPGSPPLLGN				
232	LGDLTPPPPPPQQQQ				
233	QLQALKPPSSRAEKW				
234	RQLHKQPPPREPARAQ				
235	QLRTASLPAIPNPFPE	Pepscan of			
236	TASLPAIPNPFPELTG	GRB10_MOUSE			
237	SLPAIPNPFPELTGAA				
238	GAAPGSPSVAPSSLP				
239	VAPSSLPPPSQPPAK				
240	PPPPSQPPAKHFPPGF				
241	PPSQPPAKHFPPGFQL				
242	PPAKHFPPGFQLSKLT				
243	PQRKGLPPFNAPMRS				
244	LPPFNAPMRSVSENS				
245	-				
246	-				
247	-				
248	-				
249	-				
250	-				
GYN4					
PPG[FILMVWY] x (0,40) PPG[FILMVWY]					
1	WNPAMPPPGFYPPPGY	BF2A_ARATH	1	GHPQATPPGFPGHQIN	ARRC_ARATH
2	PPGFYPPPGYPMFPYP		2	WNPAMPPPGFYPPPGY	BF2A_ARATH
			3	QQQPPSPPGFPIIGNL	C729_ARATH
			4	YRQFPCPPGFPPIIGNL	C72W_ARATH
			5	QRKPPSPPGFPIIGNL	C72X_ARATH
			6	CFYNCPPGFF	LC12_ARATH
			7	VQGLCVPPGFPDIDQA	LC28_ARATH
			8	PPQPNLPPGFRFHPTD	NA18_ARATH
			9	LTQLSLPPGFRFYPTD	NA19_ARATH
			10	MVEAKLPPGFRFHPKD	NA22_ARATH
			11	TSQSTLPPGFRFHPTD	NA29_ARATH
			12	SELLQLPPGFRFHPTD	NAC2_ARATH
			13	WRWKIRPPGFINLQIL	NUCC_ARATH
			14	GDSQYLPPGFRFHPTD	O04017
			15	DVPDIRPPGFVKEPLS	O04254
			16	ASPVLPKPPGFSTPRVS	O04535
			17	DPLTFLPPGFLETKK	O04622
			18	PGHPLPPGFRFHPTD	O22734
			19	RGVLRPLPPGFRFHPTD	O22798
			20	SEESKLPPGFLETVDK	O22820
			21	SKGCKCPPGFIGDGLK	O22925
			22	RFLWTAPPGFGARRLW	O23306
			23	EVYMAQPPGFIDKDRP	O23529
			24	FWMPQAPPGFVSLGCV	O23557
			25	FWRPHPPPGFASLGDY	O23558
			26	EVYVTQPPGFVDKDNA	O49143
			27	SLTGPVPPGFQNLTSM	O49318
			28	MGSSCLPPGFRFHPTD	O49697
			29	AFKISFPPGFRPNASY	O64539
			30	STPPPPPPGFSSNQRG	O64642
			31	VCSKQLPPGFQC	O65369
			32	KDKYEFPPGFNCVASG	O65405
			33	ILSVQPPGFVFPQNK	O65472
			34	TLPVPLPPGFFFRNGP	O65477

35	ALAEFRPPGFFFRSKQ	O65478	110	DEQMDLPPGFRFHPTD	Q9FLR3
36	ALAVRPPGFFFLRSKQ	O65479	111	RAKSGPPPGFTGAKQN	Q9FMM3
37	TLPVPQPPGFFFRERS	O65480	112	STQRFIPPGFSWTALR	Q9FN44
38	TLHVPQPPGFVFRVRF	O65483	113	FRQNSPPPGFTELASE	Q9FNJ2
39	RKFPPIPPGLKIEDL	O65500	114	KGEASVPPGFEKIWTP	Q9FNQ6
40	DQSCSVPPGFRFHPTD	O65508	115	DDLPSVPPGFESYATF	Q9FRS3
41	RPPMPRPPGFPVPGSF	O65671	116	NSFSHVPPGFRFHPTD	Q9FWX2
42	DVQDDLPPGFSSPCTD	O80663	117	TVYMEPPGFVDNKNP	Q9FX18
43	SVKCECPPGFKGDGTK	O80977	118	EVYMQFPPGFRTGDKT	Q9FXB7
44	SVKCECPPGFKGDGVK	O80979	119	PSDDNLPPGFGGPFSA	Q9FXI4
45	NGQSQVPPGFRFHPTD	O81033	120	NGVLRLLPPGFRFHPTD	Q9FY93
46	SLIMSKPPGFKYKSGQ	O81211	121	TSGCRCPPGFKGDGLK	Q9FYH7
47	SYPLKPPGFQTQQPNY	O81495	122	EVYVTQPPGFIDPDRP	Q9FZK7
48	TVFMTQPPGFEDSRP	O82493	123	YQPQLPPPGFTQQQQQ	Q9FZN9
49	YKKHGYPPGFKGLPE	O82607	124	TLPVPRPPGFFFRNRP	Q9LDM5
50	YQQPNPPGFQTQQPQQ	O82610	125	TLPVPRPPGFFFRNRS	Q9LDS6
51	TLDDTVPPGFDATNQN	PRH_ARATH	126	TLNVPPQPPGFFFRNRP	Q9LDT0
52	PFSILMPPGFDIDMHQ	Q39089	127	LPPLQFPPGFHQNLNP	Q9LEZ9
53	VWQEGLLPPGFVHRVTI	Q67XH7	128	SSGVQAPPGLDEFK	Q9LF41
54	MAPMSLPPGFRFHPTD	Q67Z40	129	DSDNSRPPGFETASPK	Q9LFC0
55	SFVNVFPPGFKIGYF	Q689D6	130	EVYIEQPPGFIEEKEE	Q9LH44
56	RCPVSAPPGFVSVTPS	Q6RF52	131	NCGKNPPPGFKCPA	Q9LIE8
57	TPSRPPPPGFSSNGRD		132	EDESLMPPGFRFHPTD	Q9LIL8
58	NYQPPPPPGFVTTQQNQ	Q7FZN4	133	HRPIPSPPGFPIIGNL	Q9LIP7
59	NYQQQPPGFAPQQNQ	Q7FZS4	134	QEIVQNPPGFDTPEVP	Q9LJ94
60	PMSGGLPPGFRPMGGG	Q84WQ1	135	AELGSPPPGFPSKVA	Q9LJA6
61	PSFVYPPGFRQILNLY	Q8GRX1	136	SEKIDLPPGFRFHPTD	Q9LJW3
62	MNLPPGFRFFPTD	Q8GWK6	137	DDIVFIPPGFVSTEQ	Q9LK46
63	VPVVDPPGFSLPFEI	Q8H1K9	138	RSRQLPPPGFTQQQQQ	Q9LKR9
64	ELDEELPPGFEEESLAR	Q8L3P4	139	NYHQPPPPGFAPQQNQ	Q9LKT2
65	EVYMRLLPPGFKCSDPS	Q8L700	140	ATRENVPPGFGEQKAP	Q9LMB7
66	TLPVPQPPGFFFRNGP	Q8L710	141	RQALSPPPGFQAVFPQ	Q9LMB8
67	MDTISAPPGFVSQTSF	Q8L7T6	142	QPALQKPPGFRDQQNQ	Q9LMN2
68	YGHSQPPGFNPMYGA	Q8L9T4	143	LQIPKPPPGFASDQKP	Q9LMS9
69	TVSVETPPGFNIQVTP	Q8LAE1	144	GRFYVDPGPFVERLNS	Q9LN29
70	VPSGNLPPGFDPSTCR	Q8LAP3	145	EEDPELPPGFG	Q9LN96
71	VVVFAPPGFKPPPEPK	Q8LAP7	146	RMPRESPPGFNDELKI	Q9LNS2
72	LLDFTGPPGFVHVQVSP	Q8LAY7	147	YQQQLPPPGFTQQQQQ	Q9LPB1
73	DIGSKLPPGFRFHPSD	Q8LB22	148	NGQSKVPPGFRFHPTD	Q9LP17
74	MDLPPGFRFHPTD	Q8LF13	149	LFGLMLPPGFDTYTYPL	Q9LQ02
75	QSLFSMPPGFDQRKQH	Q8LPN4	150	IPSGNLPPGFDPSTCR	Q9LQ19
76	RADYTFPPGFTEGQKR	Q8RWJ1	151	MVGSLPPGFRFYPTD	Q9LQK5
77	SGSVSVPFGSSDYCY	Q8RXD9	152	RPPLWIPPGFYSNILI	Q9LR50
78	QKQNFPPGFQTQQPQQ	Q8S8J9	153	MEENLPPGFRFHPTD	Q9LS50
79	SRDILDPPGFSTRASQE	Q93VE6	154	MAPVGLPPGFRFHPTD	Q9LSH5
80	RFLCTVPPGFGARLW	Q93ZZ1	155	MVEANLPPGFRFHPRD	Q9LSI1
81	TLGILKPPGFEEYRTS	Q940V3	156	RPQVSAPPGFSAFNRL	Q9LSS9
82	YSRNDPPGFVFGSGT	Q94A86	157	APNRLPPPGFSSHERV	
83	PRGPDLPFGFEGNHYA	Q94C33	158	QSTYEKPPGFGGEPDK	Q9LT25
84	QQHQLGPPGFNTVHAV	Q94C89	159	ISGSIPPPGFAPRASA	Q9LVG3
85	PVYMLQPPGFVDQKBP	Q94KV0	160	FRQIGIPPGFVDVNLHG	Q9LVP1
86	EVYMAQPPGFVDKDRP	Q94LA8	161	NRGLVKPPGFSLLELN	Q9LW32
87	SPDLGPPGFQSLPAS	Q9AUB4	162	TIAVYVLPFGFKFMPND	Q9LXY4
88	ALAVPQPPGFFFRSNH	Q9C5S8	163	AADDVPPGFGPVASR	Q9LYE6
89	DERCEPPGFDNSVVA	Q9C6G0	164	RRPHTPPGFCRHQGR	Q9LYL7
90	LTLISLPPGFDISKIP	Q9C6G8	165	APRPLVPPGFFASTILE	Q9M140
91	GGVGGAPPGFRLPLNA	Q9C7H2	166	RTQVSAPPGFSAFNRL	Q9M1E4
92	RLSGPLPPGFALSALDQ	Q9C7S5	167	APNRLPPPGFSSHQRG	
93	SSNGGVPPGFRFHPTD	Q9C878	168	PPPSAPPGFSENNNI	Q9M1Q0
94	DIYMKPPGFKTTDPS	Q9C8F4	169	QRVLRPPGFQNKCV	Q9M342
95	SSFVYPPGFRQILNLY	Q9C8J9	170	LPNGECPPGFLGFAVN	Q9M3A7
96	IMQSSMPPGFRFHPTD	Q9C8W9	171	TIAVYVLPFGFKFVVPND	Q9M3C9
97	GADLQFPPGFRFHPTD	Q9CAR0	172	RHKAQIPPGFFV	Q9M912
98	PNQYALPPGFEPQYK	Q9FF62	173	MAPVSLPPGFRFHPTD	Q9M9N8
99	FGASDKPPGFSTMES	Q9FFW9	174	GGQLSVPPGFRFHPTD	Q9MA17
100	GRSMRLPPGFRFDPPD	Q9FGQ1	175	RNERGLPPGFRFHPTD	Q9S851
101	DYSCSIPPGFRFHPTD	Q9FH59	176	SKFENVPPGFGFNSTT	Q9S9Q3
102	KVASNLPPGF EATDYA	Q9FH61	177	TGFWPTPPGFGGGT	Q9SFZ3
103	EVYIKFPPGFGSDDNR	Q9FIC5	178	NPRSMGPPGFPGIGGP	Q9SGW9
104	ALYVTKPPGFKYKSGM	Q9FJD6	179	FPGIGGPPGFPPTPFG	
105	EELVDLPPGFRFHPTD	Q9FK44	180	RLSGPLPPGFFSTLDQ	Q9SHI3
106	EEHIDLPPGFRFHPTD	Q9FKA0	181	GNVQQQPPGFAPPQHQ	Q9SHM3
107	HQPPPPPPGFYRLPAP	Q9FKP8	182	NSFSQVPPGFRFHPTD	Q9SI80
108	EVYVSQPPGFIDRDRP	Q9FLA4	183	YKKHGFPPGFTPKGKS	Q9SIM3
109	EEQMDLPPGFRFHPTD	Q9FLJ2	184	FRVRDFPPGFLDNIR	Q9SJN9

185	NYQPQPPGFAPQQNQ	Q9SJS1	22	QHQQPPILPPPGLMYT	CLG1
186	TPSRPPPPGFSSNGRD	Q9SK04	23	DLGYSVVSQPPPGYEQ	YHL002W
187	FEDHPLPPGFSGNICK	Q9SK31	24	TSTSMPPPGVPPSGNN	RRD1
188	YQQQPPPPGFTPHQQQ	Q9SKR9	25	NHITAPPPGGFWDAS	IME2
189	DKDLDAPPGFDSGSHV	Q9SL27	26	QENEGPPPPGYMCYRC	YKL059C
190	DDSSSSPPGFDDGGV	Q9SL38	27	PAPPPPPPPGAFST	VRP1
191	MESCSVPPGFRFHPTD	Q9SL41	28	PNRNSIPPPGMNPAN	CST9
192	EVYMKLPPGF EASHFN	Q9SLF0	29	NMSLKLPPPGIQDDHS	VIP1
193	DPSYPIPPGFQFDKLP	Q9SLI4	30	DLIEARRPPGIFAAMN	MYO5
194	MSLPPGFRFHPTD	Q9SLK1	31	HSKKPAPPPPGMQNKA	
195	DPRSSLPPGFRFHPTD	Q9SQQ5	32	RNGEILPPPPGF EFTM	YMR171C
196	QEVVDLPPGFRFHPTD	Q9SQQ6	33	LAQNRRIPPPGFSQNI	INP53
197	HSSPLEPPGFQLNAST	Q9SQW9	34	NVGNQPPPPGIESQWK	YPL105C
198	RNWNIRPPGFSSDEFK	Q9SR71	35	NAQMRFPPPGILTGVK	NEW1
199	FNQPPSPPGFWISFLR	Q9SRR0	36	VTILAPPPGDAYLLVQ	MUP1
200	MAPVSMPPGFRFHPTD	Q9SRZ8	37	KNKNPPPGSDDCYCT	ZAP1
201	RPRVNRPPGFMRFISN	Q9SSM2	38	SQQYAPPPGPPMAYN	YOR197W
202	CGADYPPGFRCRENE	Q9SUV8	39	PYYPPPPGHEMHGRP	NOP3
203	TVYMYQPPGFENQDRP	Q9SV56	40	FSGTVPPPGRTKAARF	RRPW_YEAST
204	GHQNQQPPGFRQAQQL	Q9SVV7	41	TSTSMPPPGVPPSGNN	YIP3_YEAST
205	ILYLRIPPGFRIILRG	Q9SW29	42	STPPPPPGGLIAHQGP	YKU4_YEAST
206	EFGHKDPGFETYLD	Q9SW43	43	AQNVTPTPPPGLTSS	MSL5 as Positive Control
207	DVYMSQPPGFIDKDRP	Q9SXQ3	44	SSIAPPPGLSGPPGFS	
208	ELYMSQPPGFVDKNRP	Q9SXQ5	45	INKPTPPGLQGPPL	
209	LPSGNLPPGFDPPTCR	Q9SYG4	46	VMQKRSRAIHSSDEGE	
210	LAQLSLPPGFRFYPTD	Q9SZR8	47	NIpYSVPHDSTQ	Negative Control
211	YQQNSPPPGFTQPPQP	Q9XH31	48	IICFVGPPGVGKTSIG	PIM1
212	YKKHGFPPGFTPKGKA	Q9XII7	49	RLYETTPPGVVMGLAW	
213	YKKHGFPPGFTPKDKV	Q9XIL8	50	RGVLLHGPPGCGKTSI	YLL034C
214	YQQQPPPPGFTPQQYQ	Q9ZQ08	51	VLLWGPPGCGKTL LAK	
215	KEEALPPGFRFHPTD	Q9ZQ25	52	PQSLRAVKPPGLFARF	DRS2
216	EVYVTQPPGFVIEGKE	Q9ZQE9	53	MSPMYAPPGAQSQFTQ	YBL005W-A
217	NYQQTPPPGFAPQQHK	Q9ZQJ9	54	SVAVQAPPYGKTELF	YBL111C
218	AYDKRAPPGFVRKSEQ	Q9ZRE3	55	GLYDYGPPGCAFQNNI	YBR121C/GRS1
219	KQPDYPPGFHV	Q9ZT57	56	STSP TISVPPGVTRTV	YBR130C/SHE3
220	EVYMSQPPGFVDKDRP	Q9ZT94	57	TRKYF SAGNYKLPPGI	YBR205W/KTR3
221	DVYVAQPPGFINPDRP	Q9ZUJ1	58	ETEMVFPPIFYEFAS	YBR229C/ROT2
222	EVYMKLPPGFRHSHPD	Q9ZVW0	59	LPGEGNILPPGVSLPN	YBR251W/MRPS5
223	RSLFSMPPGF EAGKPG	Q9ZW02	60	HIQTNNMPPGVQKNF	YBR260C/RGD1
224	RSLFSMPPGFGEKGTG	Q9ZW07	61	LLI PPGFPTKNYPPGT	YCL010C
225	LTGAVTPPGFRFVVTS	QORL_ARATH	62	IYVKQPPGFVNERNPD	YCL074W
226	PPFGFPPGFSSFYF	SUV1_ARATH	63	FLVKEKPPGVNVNSV	YCR007C
227	RELIEPPGFKDNRVS	SUV2_ARATH	64	KAKTIVWNGPPGVFEF	YCR012W/PGK1
228	-	-	65	RLHLFP PPGGLPSYMEG	YCR068W/CVT17
229	-	-	66	APREDMPPGWMPGSK	YCR076C
230	-	-	67	QSAQPPGVNPNPQGG	YCR093W/CDC39
231	-	-	68	SYSRPSAPPYG ETAS	YDL012C
232	-	-	69	IFMLGRIFPPGCTVTA	YDL052C/SLC1
233	-	-	70	KFKLIQQVPPGLDALV	YDL132W/CDC53
234	-	-	71	TQPLHVYYPGGISSPD	YDL183C
			72	VFPPGVNDDELPIRQG	YDR069C/DOA4
			73	ANDFDGVFP PPGVNDE	
			74	RSIYEIFGPPGIGKTN	YDR076W/RAD55
			75	MTLSLNTPPGVHCQPL	YDR133C
			76	AQNVTPTPPPGLTSS	MSL5 as Positive Control
			77	SSIAPPPGLSGPPGFS	
			78	INKPTPPGLQGPPL	
			79	VMQKRSRAIHSSDEGE	
			80	NIpYSVPHDSTQ	Negative Control
			81	PYQMSPMYAPPGAQSQ	YDR170W-A
			82	QMSPMYAPPGAQSQFT	
			83	DIDQYTI PPGDLLLPT	YDR200C
			84	RMVLIGPPGAGKGTQA	YDR226W/ADK1
			85	RTINAFPPGACSEYSG	YDR245W/MNN10
			86	SRLIGAPPGYVLSESG	YDR258C/HSP78
			87	DLVKIYPPGMKIIVS	YDR403W/DIT1
			88	KLTNEDPPGLMYLKAF	YDR443C/SSN2
			89	SVAVQAPPYGKTELF	YDR545W/YRF1-1
			90	RTHRYLPPGYLEGEPV	YEL032W/MCM3
			91	THRSSGKLP PPF EIVS	YEL047C
			92	PSVAVQAPPYGKTEL	YEL077C
			93	MAASVPPGGQRILQKR	YER019C-A/SBH2
			94	PPLNVSTPPPGIFGPQ	YER068W/MOT2
			95	DQYGRLLPPGWERRTDN	YER125W/RSP5
			96	GHFDHYPPGYDPTDPN	YER166W
SMY2 and SYH1					
PPG[ACFGILMVWY]					
1	AQNVTPTPPPGLTSS	MSL5 as Positive Control			
2	SSIAPPPGLSGPPGFS				
3	INKPTPPGLQGPPL				
4	VMQKRSRAIHSSDEGE				
5	NIpYSVPHDSTQ	Negative Control			
6	MSGLPPPPPGFEEDSD	PRP8			
7	DLALPPPPPPPGYEI				
8	DFTLPPPPPPGLDEL				
9	ETSTPPPPPGGLIAHQ	EAP1			
10	FPQRMPPPPGLVQFQ				
11	QYMPPPPPPGFFPMHP				
12	QAQNVTPTPPGLTSS	MSL5			
13	EQPKFSLPPPGMTTV				
14	SSIAPPPGLSGPPGFS				
15	MNQLTGIPPPGLMNNS	CCR4			
16	NTTVRPPPPGVIVYRL	SUL1			
17	SQFAPPPPPGVNVNM	PAT1			
18	YSRPSAPPYG ETASR	YDL012C			
19	NEAPPQTRKFQPPPGF	SMB1			
20	PLNVSTPPPGIFGPQH	MOT2			
21	TWPRPKGPPGVNNEK	YFL010C			

97	SVAVQAPPGYGKTELF	YER190W/YRF1-2	149	HRSSGKLPPGFEIVQA	YJR051W/OSM1
98	EEIELPPGVKPLNLL	YFL004W/VTC2	150	PSVAVQAPPGYGKTELF	YJL225C
99	GTTWPRPKGPPGVN	YFL010C	151	GAITTVVPPGFIDAST	YJR074W/MOG1
100	EKSSRQQADQAPPYS		152	AGIEHVKPPGFIKTGR	YJR095W/SFC1
101	QLSFFIPPGMSLEAKM	YFL025C/BST1	153	VFGQMNPPGARARVA	YJR121W/ATP2
102	PSVAVQAPPGYGKTELF	YFL066C	154	VRGMYSSPPGYGSRVV	YKL106W/AAT1
103	RMKEDAPPVGSASPLP	YGL058W/RAD6	155	ITSLTSLPPGGEYTI	YKL121W
104	ASSTNLPPGFSISLQP	YGL083W/SCY1	156	DLIEAKNPPGILAAMN	YKL129C/MYO3
105	GNNKQPLRPPGFFDE	YGL139W	157	DELVKRLPPGLSMLGS	YKL157W/APE2
106	CIVDGVPPGMSLTEAD	YGL148W/ARO2	158	MSTLYFKPPGIFHNAI	YKR037C/SPC34
107	HPMNVVGGPIPGANDV	YGL173C/KEM1	159	VEEIGSRPPGVLVVGK	YKR069W/MET1
108	NDVADVGLPYNIPPGF		160	PSVAVQAPPGYGKTELF	YLL066C
109	GLPYNIPPGFMTHPNG	YGL173C	161	LERQFSVPPGLLFIMM	YLR072W
110	ANDVGLPYNIPPGFMT	YGL175C/SAE2	162	EVGVFHVPPGLMSKLG	YLR092W/SUL2
111	RNRSKSPPGFRDLDFP	YGL206C/CHC1	163	LLFATQNPPGIYGGRK	YLR106C
112	KNIQAPPGAISPIILY	YGL231C	164	SKLSDGLPPGASDARG	YLR129W/DIP2
113	NSNTLPSPPGFEGNSS	YGR009C/SEC9	165	RLEIKSLPPGFIKSAL	YLR152C
114	EDKVYAPPGYEQYARP	YGR028W/MSP1	166	YFIVNKPPGIPSQPPD	YLR165C/PUS5
115	PSGVLLYGPFGCGKTM	YGR054W	167	QQQAQPPGWDFNVQI	YLR207W/HRD3
116	RIVPGVPPGAAKKTIP	YGR099W/TEL2	168	SGEYHLHPPGYTTNGS	YLR219W/MSC3
117	ESNETDPPGFLGEWL	YGR162W/TIF4631	169	AENSRRQSPGYYVIR	YLR311C
118	ASKIVIPPGMGRGNS	YGR196C/FYV8	170	KGVLLYGPPGCSKTLT	YLR397C/AFG2
119	QDTANKKAPPGYIDS	YGR206W	171	PSVAVQAPPGYGKTELF	YLR466W
120	KEQYLSKPPGIVGNT	MSL5 as Positive Control	172	AQNVTPTPPPGLTSS	MSL5 as Positive Control
121	AQNVTPTPPPGLTSS		173	SSIAPPPGLSGPPGFS	
122	SSIAPPPGLSGPPGFS	Negative Control	174	INKPTPPGLQGGPGL	
123	INKPTPPGLQGGPGL	YGR227W/DIE2	175	VMQKRSRAIHSSDEGE	Negative Control
124	VMQKRSRAIHSSDEGE	YGR296W/YRF1-3	176	NIpYSVPHDSTQ	YML114C/TAF65
125	NIpYSVPHDSTQ	YHL002W	177	SASNTPQPPGLDDEDA	YML133C
126	WDPKITTPPGIYIILGL	YHL008C	178	PSVAVQAPPGYGKTELF	YMR009W
127	PSVAVQAPPGYGKTELF	YHL050C	179	SGDLLLPPGIYHRFT	YMR022W/QRI8
128	DLGYSVVSQPPGYEQ	YHR104W/GRE3	180	QQLIKDSPPGIVAGPK	YMR045C
129	HSLRSPPGVFPVRGMG	YHR150W	181	QMSPMYAPPGAQSQFT	YMR070W/MOT3
130	SVAVQAPPGYGKTELF		182	PAQPLHLPPGKINTM	YMR078C/CTF18
131	PFEKYPPGFYTGADD	YHR202W	183	KILLHLHPPGIGKTSV	YMR128W/ECM16
132	RRAQFPPGVDLADV	YHR218W	184	CKIHQKLPPGAILVFL	YMR169C/ALD3
133	SLADVIPPPTGWSFDPN	YIL122W	185	LIKKAGFPVGVNVIP	YMR170C/ALD2
134	LSDATWPPGLRSSEIF	YIL177C	186	LIKKAGFPVGVNVIP	YMR214W/SCJ1
135	SVAVQAPPGYGKTELF	YJL020C/BBC1	187	KFFHVDVPPGAPRNYM	YMR264W/CUE1
136	IMPQYLYPPGMGPQAQ	YJL076W/NET1	188	RGDEFSPPPGFEPSPRA	YNL218W/MGS1
137	PSVAVQAPPGYGKTELF	YJL088W/ARG3	189	PSMILWGPPGVGKTSL	YNL240C/NAR1
138	DAPKYVPPGIPTNDT	YJL091C	190	SLYGRSLPPGWDPRVH	YNL339C/YRF1-6
139	TNSKTLVPPGIISNEK	YJL093C/TOK1	191	PSVAVQAPPGYGKTELF	YNR051C/BRE5
140	ISVSISTPPGIEMSD	YJL099W/CHS6	192	KKPTSNPPGIFTNGT	YNR052C/POP2
141	LKNSNLMPPGISSVQY	YJL106W/IME2	193	PVSVASLPPGLNVLQQ	MSL5 as Positive Control
142	QVKTVFDPPGIFAVNI	YJL112W/MDV1	194	AQNVTPTPPPGLTSS	MSL5 as Positive Control
143	NTNPELKPGLVECPF	YJL128C/PBS2	195	SSIAPPPGLSGPPGFS	
144	TNHTAPPGGFWDDA	YJL168C/SET2	196	INKPTPPGLQGGPGL	
145	FQDSFLIPPGVETKKI	YJL225C	197	VMQKRSRAIHSSDEGE	
146	ARRAVKLPGGMSLKM		198	NIpYSVPHDSTQ	Negative Control
147	DLRRVRLPPGWEIHE		199	-	-
148	PSVAVQAPPGYGKTELF		200	-	-

12.2 NMR Backbone Assignment of the SMY2-GYF Domain

Table 12.5: List of chemical shifts of the backbone NH groups in SMY2-GYF

The backbone assignment was obtained by standard triple resonance experiments with SMY2-GYF. Chemical shifts of carbon atoms are omitted. Proline residues are devoid of an amide-proton and cannot be observed in HSQC spectra (denoted by –). Residues marked by an asterisk could not be assigned unambiguously (ND: not determined).

SMY2 Residue	H ^N [ppm]	N ^H [ppm]			
Val 12	120.452	8.213	Leu 54	129.421	8.206
Ser 13	119.913	8.347	Gly 55	115.812	9.163
Val 14	122.445	8.219	Ser 56	119.081	8.495
Glu 15	124.999	8.319	Thr 57	109.527	7.245
Ser 16	121.480	8.786	Pro 58	–	–
Ser 17	116.975	9.187	Glu 59	117.576	8.570
Trp 18	121.034	9.569	Thr 60	106.381	8.630
Arg 19	118.692	9.308	Leu 61	127.209	8.983
Tyr 20	114.446	8.758	Gly 62	113.077	10.226
Ile 21	120.631	8.468	Ile 63	115.230	9.259
Asp 22	126.411	8.855	Asn 64	125.544	7.965
Thr 23	109.359	8.092	Asp 65	113.014	9.093
Gln 24	119.239	8.227	Ile 66	113.980	7.292
Gly 25	108.436	8.002	Phe 67	123.267	8.910
Gln 26	122.583	8.409	Ile 68	120.334	9.124
Ile 27	124.408	8.237	Thr 69	111.051	8.554
His 28	128.289	9.295	Leu 70	123.870	8.931
Gly 29	109.277	8.510	Gly 71	105.641	9.365
Pro 30	–	–	Glu 72	124.149	8.062
Phe 31	121.470	9.866	Leu 73	121.815	8.229
Thr 32	112.967	8.283	Met 74	115.655	8.337
Thr 33	117.811	8.718	Thr 75*	ND	ND
Gln 34	119.751	8.657	Lys 76	121.277	8.062
Met 35	118.587	7.311	Leu 77	117.732	7.713
Met 36	116.249	7.679	Glu 78	115.976	7.832
Ser 37	113.687	8.923	Lys 79	118.971	8.128
Gln 38	117.705	7.453	Tyr 80	117.450	7.841
Trp 39	121.656	7.766	Asp 81	120.158	7.731
Tyr 40	121.125	8.820	Thr 82*	ND	ND
Ile 41	123.528	9.192	Asp 83*	ND	ND
Gly 42	105.641	7.861	Pro 84	–	–
Gly 43	107.367	7.512	Phe 85	119.618	7.791
Tyr 44	116.539	7.687	Thr 86	116.550	9.485
Phe 45	117.213	8.406	Thr 87	117.170	7.310
Ala 46	126.147	8.416	Phe 88	122.200	8.252
Ser 47*	ND	ND	Asp 89	119.998	8.132
Thr 48	106.778	7.050	Lys 90	118.888	7.921
Leu 49	124.603	7.448	Leu 91	115.705	7.867
Gln 50	125.739	8.591	His 92	114.028	8.213
Ile 51	117.636	9.555	Val 93	118.584	6.881
Ser 52	113.049	8.780	Gln 94	124.381	8.085
Arg 53	132.638	9.105	Thr 95	114.450	8.137

A

	1	11	21	31	41	
193	<i>G</i> <i>S</i> <i>N</i> <i>G</i> <i>M</i> <i>S</i> <i>Q</i> <i>L</i> <i>P</i> <i>A</i>	<i>P</i> <i>V</i> <i>S</i> <i>V</i> <i>E</i> <i>S</i> <i>S</i> <i>W</i> <i>R</i> <i>Y</i>	<i>I</i> <i>D</i> <i>T</i> <i>Q</i> <i>G</i> <i>Q</i> <i>I</i> <i>H</i> <i>G</i> <i>P</i>	<i>F</i> <i>T</i> <i>T</i> <i>Q</i> <i>M</i> <i>M</i> <i>S</i> <i>Q</i> <i>W</i> <i>Y</i>	<i>I</i> <i>G</i> <i>G</i> <i>Y</i> <i>F</i> <i>A</i> <i>S</i> <i>T</i> <i>L</i> <i>Q</i>	240
241	<i>I</i> <i>S</i> <i>R</i> <i>L</i> <i>G</i> <i>S</i> <i>T</i> <i>P</i> <i>E</i> <i>T</i>	<i>L</i> <i>G</i> <i>I</i> <i>N</i> <i>D</i> <i>I</i> <i>F</i> <i>I</i> <i>T</i> <i>L</i>	<i>G</i> <i>E</i> <i>L</i> <i>M</i> <i>T</i> <i>K</i> <i>L</i> <i>E</i> <i>K</i> <i>Y</i>	<i>D</i> <i>T</i> <i>D</i> <i>P</i> <i>F</i> <i>T</i> <i>T</i> <i>F</i> <i>D</i> <i>K</i>	<i>L</i> <i>H</i> <i>V</i> <i>Q</i> <i>T</i> <i>T</i> <i>S</i> <i>S</i> <i>D</i> <i>S</i>	290

B

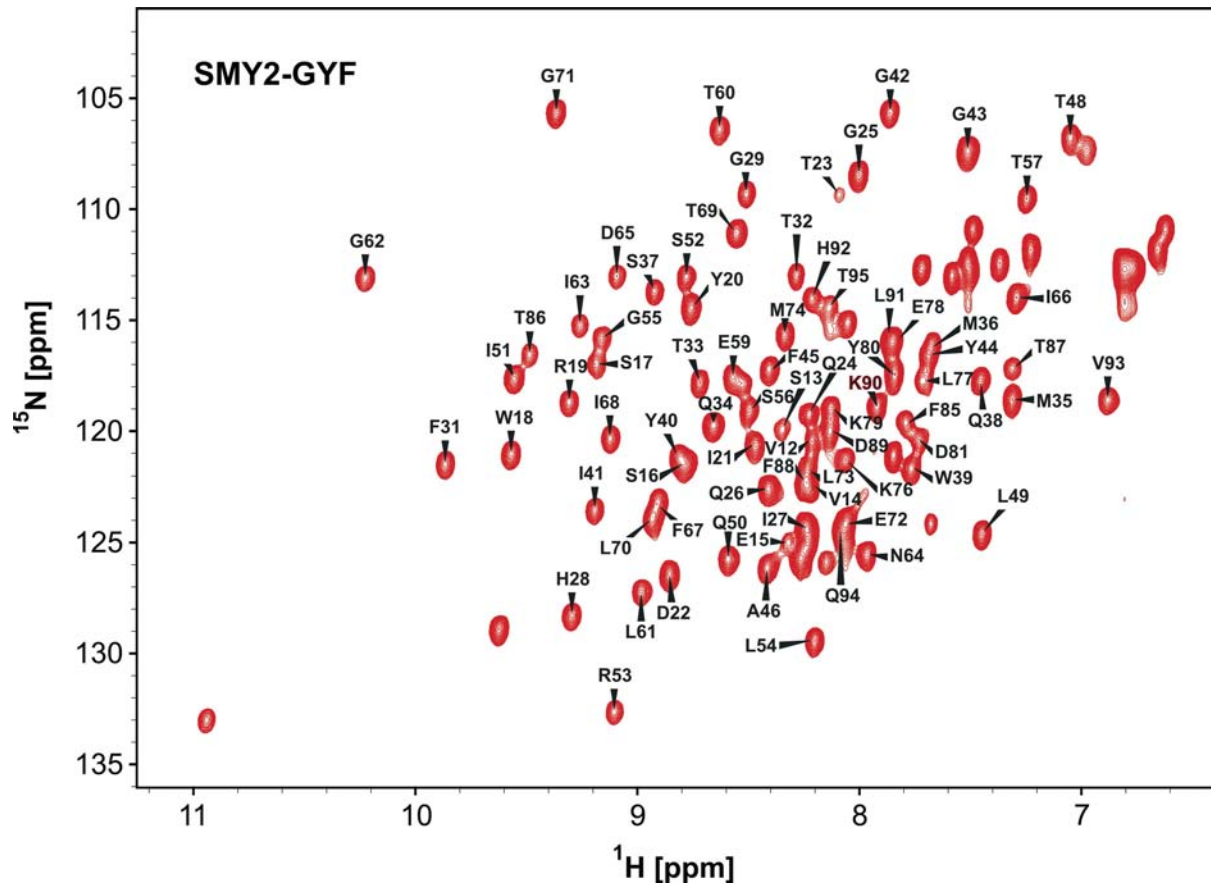


Fig. 12.1: Sequence of the SMY2-GYF construct and assignment of its ^1H - ^{15}N -HSQC spectrum

(A) Sequence of the SMY2-GYF construct, used for the backbone assignment. Italicized residues do not belong to the cognate SMY2 protein. Flanking numbers indicate the position of residues within full-length SMY2. (B) Assignment of NH resonances in the ^1H - ^{15}N -HSQC spectrum of SMY2-GYF according to the chemical shifts in Table 12.5. Resonances are labeled with amino acid type and residue number according to (A). The spectrum was recorded at 299 K with a 1.2 mM protein sample, buffered in PBS.