

## (A) Melan A (EAAGIGILTV) tetramer sorted MM909.24

Key	%	V-Gene	J-Gene	CDR3 $\alpha$	Key	%
* $\Delta$	31.62	TRAV12-2	TRAJ8	CAVQKLVF	*	16.91
*	10.09	TRAV12-2	TRAJ35	CALGFGNVLHC	* $\Delta$	10.55
$\square$	9.54	TRAV12-2	TRAJ45	CAVNSGGGADGLTF	*	8.48
	5.41	TRAV12-2	TRAJ35	CAWGRGFGNVLHC	$\square$	6.74
	4.77	TRAV12-2	TRAJ23	CAVNNQGGKLIF	$\square$	6.44
$\square$	4.27	TRAV12-2	TRAJ49	CAVNQFYF	$\square$	4.50
$\square$	4.11	TRAV12-2	TRAJ35	CAVSIGFGNVLHC	*	3.85
*	3.97	TRAV12-2	TRAJ31	CAVNNARLMF	$\square$	3.35
$\square$	3.64	TRAV23DV6	TRAJ54	CAARGAQKLVF	*	2.84
*	3.42	TRAV12-2	TRAJ45	CAAAGGGADGLTF	*	2.72
$\square$	3.00	TRAV12-2	TRAJ23	CAVDNQGGKLIF	*	2.27
$\square$	2.89	TRAV8-1	TRAJ23	CAVNQGGKLIF	$\square$	2.00
	2.84	TRAV12-2	TRAJ39	CAVSAGNMLTF	*	1.98
	2.75	TRAV8-3	TRAJ17	CAVGLAPQAAGNKLTF		1.61
$\square$	1.48	TRAV12-2	TRAJ31	CAANNARLMF	*	1.44
$\square$	0.78	TRAV12-2	TRAJ45	CAGGGGADGLTF		1.44
	0.67	TRAV12-2	TRAJ22	CAVNKAARQLTF	$\square$	1.40
*	0.60	TRAV12-2	TRAJ9	CAVNTGGFKTIF		1.36
$\square$	0.55	TRAV12-3	TRAJ35	CAMSVGFGNVLHC	$\square$	1.15
	0.55	TRAV12-2	TRAJ13	CAVLRGYQKVTF	$\square$	1.09
$\square$	0.51	TRAV10	TRAJ47	CVVSASNGNKLVF		1.05
	0.37	TRAV12-2	TRAJ29	CAVTHFSGNTPLVF		0.98
	0.34	TRAV27	TRAJ45	CAGQYSGGGADGLTF	$\square$	0.98
	0.34	TRAV38-2DV8	TRAJ41	CAYRRVDALNF	$\square$	0.93
*	0.30	TRAV12-2	TRAJ45	CAAGGGADGLTF		0.87
$\square$	0.25	TRAV12-2	TRAJ9	CAVHTGGFKTIF		0.77
	0.15	TRAV12-2	TRAJ26	CAVGQNFVF	$\square$	0.74
$\square$	0.14	TRAV38-1	TRAJ49	CAFMPKNTGNQFYF		0.68
	0.14	TRAV12-2	TRAJ49	CGSNTGNQFYF	$\square$	0.68
	0.10	TRAV21	TRAJ15	CAVTHPSQAGTALIF	$\square$	0.65
	0.10	TRAV29DV5	TRAJ58	CAASASETSGSRLTF		0.65
	0.10	TRAV4	TRAJ20	CLVGEFDKLSF	*	0.65
$\square$	0.08	TRAV29DV5	TRAJ34	CAALYNTDKLIF	$\square$	0.62
$\square$	0.07	TRAV38-2DV8	TRAJ33	CAYLVGSNYQLIW	$\square$	0.58
$\square$	0.07	TRAV13-1	TRAJ43	CAATLYNNDMRF	$\square$	0.58

Key: Melan A single Shared TCRs  $\Delta$  MEL8 TCR

$\square$  BST2 shared TCRs  $\square$  IMP-2 shared TCRs

\* Multipronged (Melan A, BST2 and IMP2)

\* 0.53

0.50

$\square$  0.49

0.46

$\square$  0.42

$\square$  0.35

$\square$  0.35

\* 0.34

\* 0.33

$\square$  0.32

$\square$  0.29

0.27

$\square$  0.26

$\square$  0.24

0.23

0.23

$\square$  0.21

0.20

\* 0.11

$\square$  0.09

0.08

0.08

\* 0.06

\* 0.05

0.05

\* 0.04



#### 4 TIL TCRs

V-gene	J-Gene	CDR3β
TRBV27	TRBJ2-3	CASSFAGTDTQYF
TRBV6-5	TRBJ2-7	CASSYSFTEATYEQYF
TRBV6-5	TRBJ2-5	CASSPYSGSGETQYF
TRBV27	TRBJ2-7	CASSLGLAGNEQYF
TRBV12-4	TRBJ2-7	CASSWAGPVEQYF
TRBV15	TRBJ2-1	CATSRDRGWQYF
TRBV4-2	TRBJ2-1	CASSQGLAGSNEQYF
TRBV13	TRBJ1-5	CASSLGIISGQPQHF
TRBV29-1	TRBJ2-7	CSVEESSGIYEYF
TRBV28	TRBJ1-5	CASSLTGLGQPQHF
TRBV20-1	TRBJ2-1	CSATGLAGLGEQYF
TRBV28	TRBJ1-5	CASSYRGLGQPQHF
TRBV6-5	TRBJ1-6	CASSYVGLGSPLHF
TRBV28	TRBJ1-5	CASSWGGGSGQPQHF
TRBV27	TRBJ1-5	CASSSAGMGQPQHF
TRBV4-2	TRBJ1-1	CASSQEGEGEAFF
TRBV27	TRBJ2-2	CASRVGILSGELFF
TRBV19	TRBJ1-2	CASSSGLLILSGYTF
TRBV28	TRBJ1-4	CASSPSGTVYEKLF
TRBV10-3	TRBJ2-3	CAISPGEGTDTQYF
TRBV14	TRBJ2-7	CASGLAGVGAEQYF
TRBV4-2	TRBJ2-1	CASSQGLLLDNEQYF
TRBV27	TRBJ2-5	CASSPSWAHETQYF
TRBV27	TRBJ2-6	CASSPGLTANVLT
TRBV28	TRBJ1-6	CASSFQGLGSPLHF
TRBV27	TRBJ2-3	CASSLGLGVDYQYF
TRBV20-1	TRBJ1-5	CSASEGIGQPQHF
TRBV30	TRBJ1-5	CAWSHTGVGQPQHF
TRBV7-3	TRBJ2-3	CASSSGLTDTQYF
TRBV6-2	TRBJ1-5	CASSPAGLGQPQHF
TRBV4-2	TRBJ2-1	CASSQEPLFGYNEQYF
TRBV20-1	TRBJ1-5	CSAPQTGLGQPQHF
TRBV27	TRBJ2-2	CASSFLQGTGELFF
TRBV27	TRBJ2-7	CASSLGGGGYEYF
TRBV27	TRBJ2-3	CASSLGGADTQYF

Key	%	V-Gene
* Δ	43.19	TRAV12-2
*	13.75	TRAV12-2
□	10.07	TRAV12-2
□	8.88	TRAV12-2
*	8.58	TRAV12-2
	3.52	TRAV12-2
□	2.81	TRAV12-2
	2.40	TRAV12-2
□	1.94	TRAV12-2
*	1.54	TRAV12-2
□	0.47	TRAV12-2
	0.46	TRAV12-2
□	0.40	TRAV12-2
	0.30	TRAV12-2
*	0.27	TRAV12-2
	0.25	TRAV2
	0.25	TRAV12-2
	0.22	TRAV12-2
*	0.19	TRAV12-2
	0.16	TRAV12-2
□	0.09	TRAV12-2
	0.09	TRAV36DV7
	0.09	TRAV12-2
	0.07	TRAV12-2

Key: **BST2 single** Sh  
 □ Melan A shared TCI  
 \* Multipronged (Me

TRBV19	TRBJ1-2	CASTLGTGDGYTF
TRBV12-4	TRBJ1-4	CASSLTKEKLFF
TRBV27	TRBJ1-1	CASSLSGAEAFF
TRBV4-3	TRBJ1-1	CASSWGQLMNTEAFF
TRBV28	TRBJ2-7	CASSYTGTLSYEQYF
TRBV27	TRBJ2-2	CASSLSVISTGELFF
TRBV4-2	TRBJ2-7	CASSQEQLAGPEQYF
TRBV4-3	TRBJ1-5	CASSPGTIYQPQHF
TRBV5-6	TRBJ1-5	CASSLTGLGQPQHF
TRBV15	TRBJ2-7	CATSRDMDPEQYF
TRBV28	TRBJ1-5	CASSLQGLGQPQHF
TRBV10-2	TRBJ1-1	CASGIDSPTEAFF
TRBV7-2	TRBJ2-1	CASSPDPFGLAGNEQFF
TRBV7-2	TRBJ2-7	CATSGLAGAYEQYF
TRBV5-8	TRBJ1-6	CASSLAGLGSPLHF
TRBV4-2	TRBJ2-7	CASSQESALEQYF
TRBV28	TRBJ2-2	CASGKGQIFAGELFF
TRBV12-4	TRBJ1-4	CASSPTGEKLFF
TRBV6-5	TRBJ1-2	CASAGGALVGYGYTF
TRBV6-1	TRBJ1-5	CASSEYTSGNQPQHF
TRBV20-1	TRBJ2-3	CSARGGVGADTQYF
TRBV6-5	TRBJ1-1	CASSPGQLSPEAFF
TRBV30	TRBJ1-5	CAWSSQGLGQPQHF
TRBV19	TRBJ1-2	CASSFGPLANYGYTF
TRBV28	TRBJ2-7	CASSFVLAGGGYF
TRBV19	TRBJ1-1	CASSATVLGTEAFF



**(B) BST2 (LLLGIGILVL) tetramer sorted MM909.24 TIL TCRs**

J-Gene	CDR3α	Key	%	V-gene	J-Gene
TRAJ8	CAVQKLVF	* Δ	19.92	TRBV6-5	TRBJ2-7
TRAJ45	CAAAGGGADGLTF	*	15.07	TRBV20-1	TRBJ2-1
TRAJ49	CAVNQFYF	□	8.93	TRBV28	TRBJ1-5
TRAJ31	CAVNIGARLMF	*	6.56	TRBV29-1	TRBJ2-7
TRAJ31	CAVNNARLMF	□	6.01	TRBV27	TRBJ2-2
TRAJ45	CAVNMGGGADGLTF	□	4.87	TRBV19	TRBJ1-6
TRAJ16	CAVASDGQKLLF	*	3.92	TRBV4-2	TRBJ2-1
TRAJ43	CAVNDMRF	□	3.51	TRBV28	TRBJ2-2
TRAJ45	CAGGGGADGLTF	*	3.46	TRBV4-3	TRBJ1-5
TRAJ9	CAVNTGGFKTIF		2.89	TRBV2	TRBJ2-2
TRAJ31	CAANNARLMF	*	2.70	TRBV5-6	TRBJ1-5
TRAJ31	CAGNNARLMF		2.36	TRBV4-2	TRBJ2-7
TRAJ23	CAVNQGGKLIF		2.30	TRBV28	TRBJ1-5
TRAJ31	CASDNARLMF		2.03	TRBV27	TRBJ1-2
TRAJ45	CAAGGGADGLTF	□	1.51	TRBV7-2	TRBJ2-7
TRAJ32	CAVEDPTFGGATNKLIF	*	1.49	TRBV19	TRBJ1-2
TRAJ45	CAGGGGGADGLTF		1.44	TRBV28	TRBJ1-2
TRAJ43	CAVDDMRF	*	1.13	TRBV6-5	TRBJ2-5
TRAJ35	CALGFGNVLHC		0.84	TRBV6-2	TRBJ1-5
TRAJ11	CAVDSGYSTLTF	*	0.76	TRBV27	TRBJ2-3
TRAJ42	CAVYGGSQGNLIF		0.60	TRBV29-1	TRBJ2-2
TRAJ34	CAVQTDKLIF		0.58	TRBV5-4	TRBJ2-1
TRAJ43	CAEGPDMRF		0.58	TRBV15	TRBJ2-2
TRAJ45	CAVGGGADGLAF	□	0.46	TRBV6-1	TRBJ1-5
			0.46	TRBV28	TRBJ1-5
shared TCRs Δ MEL8 TCR			0.46	TRBV20-1	TRBJ1-5
Rs □ IMP-2 shared TCRs			0.37	TRBV7-9	TRBJ2-7
plan A, BST2 and IMP2)		□	0.37	TRBV6-2	TRBJ1-5
		□	0.34	TRBV28	TRBJ1-5
			0.32	TRBV28	TRBJ1-5
		*	0.28	TRBV28	TRBJ1-5
			0.24	TRBV10-3	TRBJ2-5
			0.24	TRBV6-5	TRBJ2-7
		□	0.24	TRBV6-3	TRBJ2-7
			0.22	TRBV2	TRBJ1-5

	0.21	TRBV19	TRBJ1-5
*	0.21	TRBV19	TRBJ1-1
	0.21	TRBV28	TRBJ1-2
	0.20	TRBV5-6	TRBJ1-1
	0.18	TRBV6-5	TRBJ2-6
	0.18	TRBV20-1	TRBJ1-2
*	0.16	TRBV30	TRBJ1-5
□	0.15	TRBV7-2	TRBJ2-1
*	0.15	TRBV6-5	TRBJ1-2
	0.12	TRBV27	TRBJ1-5
	0.11	TRBV29-1	TRBJ1-1
*	0.10	TRBV19	TRBJ1-2
	0.09	TRBV5-4	TRBJ2-7
	0.09	TRBV20-1	TRBJ1-5
	0.08	TRBV19	TRBJ2-3
	0.07	TRBV29-1	TRBJ2-1
	0.07	TRBV7-7	TRBJ2-2
*	0.05	TRBV27	TRBJ1-5
	0.05	TRBV7-7	TRBJ2-5
	0.05	TRBV28	TRBJ2-7





(C)

CDR3 $\beta$	Key	%	V-Gene	J-Gene
CASSYSFTEATYEQYF	*	20.68	TRAV12-2	TRAJ35
CSATGLAGLGEQFF	*	7.36	TRAV12-2	TRAJ31
CASSLQQLGQPQHF	□	5.29	TRAV12-2	TRAJ45
CSVEESSGIYEQYF	□	3.89	TRAV12-3	TRAJ35
CASSLSVISTGELFF	*	3.34	TRAV12-2	TRAJ45
CASTLGGTLGSPLHF	* Δ	3.34	TRAV12-2	TRAJ8
CASSQGLAGSNEQFF	*	2.87	TRAV12-2	TRAJ45
CASGKGQIFAGELFF	□	2.81	TRAV29DV5	TRAJ34
CASSPGTIYQPQHF	□	2.53	TRAV12-2	TRAJ35
CATGDGINTGELFF	□	2.46	TRAV23DV6	TRAJ54
CASSLTGLGQPQHF		2.20	TRAV12-2	TRAJ15
CASSQGVLVIAGVGEQYF		1.56	TRAV12-2	TRAJ22
CASSWGMGQPQHF		1.44	TRAV12-2	TRAJ26
CASSPAPGWGYTF		1.41	TRAV12-2	TRAJ35
CATSGLAGAYEQYF		1.23	TRAV38-2DV8	TRAJ49
CASSFGPLANYGYTF		1.23	TRAV8-6	TRAJ47
CASSFQQLGYGYTF	□	1.02	TRAV13-1	TRAJ43
CASSPYSGSGETQYF		0.94	TRAV38-2DV8	TRAJ48
CASSAGLGQPQHF	□	0.89	TRAV10	TRAJ47
CASSFAGTDTQYF		0.83	TRAV35	TRAJ26
CSVGPGQGTGELFF		0.71	TRAV38-2DV8	TRAJ52
CASSLAPPGITVNEQFF	□	0.60	TRAV38-2DV8	TRAJ33
CATSRGDTGELFF	□	0.46	TRAV38-1	TRAJ49
CASSEYTSGNQPQHF	*	0.43	TRAV12-2	TRAJ9
CASSFQSGSQPQHF		0.39	TRAV19	TRAJ30
CSARETGVGQPQHF		0.38	TRAV29DV5	TRAJ23
CASSPAAGGSYEQYF		0.33	TRAV29DV5	TRAJ42
CASSPAGLGQPQHF	□	0.33	TRAV12-2	TRAJ31
CASSFQQLGQPQHF		0.27	TRAV38-2DV8	TRAJ11
CASGPQQLGQPQHF		0.25	TRAV12-2	TRAJ35
CASSYRGLGQPQHF		0.16	TRAV14DV4	TRAJ54
CAISVPTKADLGTQYF		0.12	TRAV12-2	TRAJ39
CASSPGQGYEQYF	□	0.12	TRAV12-2	TRAJ42
CASTLGQGWEQYF	□	0.11	TRAV12-2	TRAJ16
CASSPGQGPQHF		0.10	TRAV12-3	TRAJ54

CASRPQGLGQPQHF  
 CASSATVLGTEAFF  
 CASSFPLAGGYTF  
 CASSGIRNRVLMNTEAFF  
 CASSSGALGGNVLTF  
 CSASEGLHGTYF  
 CAWSSQGLGQPQHF  
 CASSPDPFGLAGNEQFF  
 CASAGGALVGYGYTF  
 CASSLGYGQPQHF  
 CSGQANTEAFF  
 CASTLGTGDGYTF  
 CASSPVGNSVGYEQYF  
 CSAPQTGLGQPQHF  
 CASSPELTDTQYF  
 CSVEGSLGRALRANEQFF  
 CASSLGHNTGELFF  
 CASSSAGMGQPQHF  
 CASSPPMVQETQYF  
 CASSLASYEQYF

□	0.08	TRAV12-2	TRAJ9
	0.06	TRAV12-1	TRAJ43
	0.04	TRAV12-2	TRAJ5
	0.03	TRAV16	TRAJ26
	0.03	TRAV12-2	TRAJ43
	0.02	TRAV12-2	TRAJ43
	0.02	TRAV12-2	TRAJ35
	0.01	TRAV3	TRAJ35
	0.01	TRAV8-6	TRAJ49
□	0.01	TRAV12-2	TRAJ23

Key: IMP2 single Shared TCRs

□ Melan A shared TCRs □ BST

\* Multipronged (Melan A, BST)



IMP2 (NLSALGIFST) tetramer sorted MM909.24 TIL TCRs

CDR3α	Key	%	V-gene	J-Gene
CALGFGNVLHC	*	19.34	TRBV6-5	TRBJ2-5
CAVNNARLMF		8.82	TRBV11-3	TRBJ2-1
CAVNSGGGADGLTF	*	7.99	TRBV27	TRBJ2-3
CAMSVGFGNVLHC		7.71	TRBV10-1	TRBJ1-5
CAAAGGGADGLTF	□	5.42	TRBV12-4	TRBJ2-7
CAVQKLVF	□	4.81	TRBV27	TRBJ2-7
CAAGGGADGLTF	* Δ	4.44	TRBV6-5	TRBJ2-7
CAALYNTDKLIF	□	4.33	TRBV7-3	TRBJ2-3
CAVSIGFGNVLHC		2.70	TRBV7-6	TRBJ2-1
CAARGAQKLVF	*	2.51	TRBV28	TRBJ1-5
CAVGGQGTALIF		2.40	TRBV5-6	TRBJ2-5
CAVPSGSARQLTF	□	1.88	TRBV13	TRBJ1-5
CAVPDPENFVF		1.83	TRBV28	TRBJ1-1
CAVNIGFGNVLHC	*	1.77	TRBV28	TRBJ1-5
CASTDGNQFYF		1.62	TRBV7-6	TRBJ1-1
CAVSDNGNKLVF	*	1.55	TRBV19	TRBJ1-1
CAATLYNNDMRF		1.46	TRBV18	TRBJ2-1
CAYRSGGFGNEKLTf	*	1.33	TRBV29-1	TRBJ2-7
CVVSASNGNKLVF	□	1.02	TRBV28	TRBJ1-5
CAGQDNYGQNFVF	*	0.97	TRBV27	TRBJ1-5
CAYNAGGTSYGKLTf		0.96	TRBV14	TRBJ1-6
CAYLVGSNYQLIW	□	0.93	TRBV27	TRBJ2-7
CAFMKPNTGNQFYF	□	0.81	TRBV10-3	TRBJ2-3
CAVNTGGFKTIF	□	0.78	TRBV28	TRBJ2-7
CAPDPEIF	□	0.72	TRBV6-5	TRBJ1-6
CAAWRGGKLIF	□	0.71	TRBV15	TRBJ2-7
CAAEGDYGGSQGNLIF	*	0.60	TRBV30	TRBJ1-5
CAVNIGARLMF		0.55	TRBV27	TRBJ2-2
CAYRREGGSGYSTLTf		0.54	TRBV19	TRBJ1-5
CAVSRGFGNVLHC	*	0.53	TRBV19	TRBJ1-2
CAMREEGAQKLVF		0.52	TRBV4-1	TRBJ2-1
CAVSNAGNMLTF		0.50	TRBV5-8	TRBJ2-1
CAVYGGSQGNLIF		0.49	TRBV4-2	TRBJ2-3
CAVASDGQKLLF		0.47	TRBV6-5	TRBJ2-1
CAIGEGAQKLVF	□	0.42	TRBV27	TRBJ2-3

CAVHTGGFKTIF	*	0.39	TRBV20-1	TRBJ1-5
CVVNNNNDMRF		0.38	TRBV28	TRBJ1-5
CALGGTGRRALTF	□	0.33	TRBV27	TRBJ2-2
CAVAYGQNFVF		0.33	TRBV12-4	TRBJ2-1
CAVKNNDMRF	□	0.32	TRBV27	TRBJ2-2
CAVNGGNDMRF	□	0.32	TRBV15	TRBJ2-1
CAVGKGFGNVLHC		0.32	TRBV24-1	TRBJ2-1
CAVRDTGFGNVLHC		0.30	TRBV28	TRBJ1-1
CAVSSTGNQFYF		0.29	TRBV11-2	TRBJ2-4
CAVDNQGGKLIF	□	0.27	TRBV27	TRBJ1-1
		0.26	TRBV28	TRBJ2-5
3 ▲ MEL8 TCR		0.25	TRBV27	TRBJ1-5
12 shared TCRs	□	0.24	TRBV19	TRBJ1-6
T2 and IMP2)		0.24	TRBV3-1	TRBJ2-7
	□	0.21	TRBV6-2	TRBJ2-7
	*	0.18	TRBV19	TRBJ1-2
	*	0.18	TRBV4-2	TRBJ2-1
	*	0.18	TRBV20-1	TRBJ2-1
		0.18	TRBV19	TRBJ2-1
	□	0.16	TRBV27	TRBJ2-5
		0.15	TRBV27	TRBJ2-1
		0.14	TRBV7-9	TRBJ1-1
	□	0.13	TRBV28	TRBJ1-4
	*	0.08	TRBV5-6	TRBJ1-5
	□	0.08	TRBV20-1	TRBJ1-5
	*	0.08	TRBV4-3	TRBJ1-5
		0.07	TRBV30	TRBJ1-5
		0.07	TRBV4-2	TRBJ2-3
	□	0.06	TRBV27	TRBJ2-6
		0.05	TRBV27	TRBJ2-7
		0.05	TRBV27	TRBJ2-2
		0.05	TRBV27	TRBJ2-1
	*	0.05	TRBV6-5	TRBJ1-2
		0.05	TRBV19	TRBJ1-5
		0.04	TRBV27	TRBJ2-1
	□	0.03	TRBV4-2	TRBJ2-7
		0.02	TRBV7-6	TRBJ2-5

0.02

TRBV6-2

TRBJ1-1

**CDR3 $\beta$** 

CASSPYSGSGETQYF

**CASSLEGMGLAGENEQFF**

CASSFAGTDTQYF

**CASSQGNQPQHF**

CASSWAGPVEQYF

CASSLGLAGNEQYF

CASSYSFTEATYEQYF

CASSSGLTDTQYF

**CASSMEGGPYNEQFF**

CASSLTGLGQPQHF

**CASSLGGSSVETQYF**

CASSLGIISGQPQHF

**CASSLQGLGRNAFF**

CASSYRGLGQPQHF

**CASSPLPGTGGTEAFF**

CASSATVLGTEAFF

**CASSRGENEQFF**

CSVEESSGIYEQYF

CASSFQGLGQPQHF

CASSSAGMGQPQHF

**CASSQHLDSPLHF**

CASSLGGGGYEQYF

CAISPGEGTDTQYF

CASSYTGTLSYEQYF

CASSYVGLGSPLHF

CATSRDMDPEQYF

CAWSSQGLGQPQHF

**CASSFILQGGELFF****CASSIEGDQPQHF**

CASTLGTGDGYTF

**CASSQDVLGGRKFF****CASSWGGLINEQFF****CASSQGLLTDQYF****CASSYAPSGEQFF**

CASSLGGADTQYF



CSAPQTGLGQPQHF  
CASIFQGAGQPQHF  
CASSFLQGTGELFF  
CASSLGGGDNEQFF  
CASRVGILSGELFF  
CATSRDRGWEQFF  
CATSDRGQGANWDEQFF  
CASSSQGLGTEAFF  
CASSLEGGAFVDIQYF  
CASSLSGAEAFF  
CASSLSGGGETQYF  
CASSFYGLGQPQHF  
CASTLGGTLGSPLHF  
CASSPDTYEQYF  
CASTLGQGWEQYF  
CASSFGPLANYGYTF  
CASSQGLAGSNEQFF  
CSATGLAGLGEQFF  
CASTPGLLSYNEQFF  
CASSPSWAHETQYF  
CASTLAGGIPFRDNEQFF  
CASSLGLIMNTEAFF  
CASSPSGTVYEKLFF  
CASSLTGLGQPQHF  
CSASEGIGQPQHF  
CASSPGTIYQPQHF  
CAWSRQGVGQPQHF  
CASSQGRLAGGPYF  
CASSPGLTANVLT  
CASSLSFIFHGGTGPYEYF  
CASSLSGGSNTGELFF  
CASSSGGFGPEQFF  
CASAGGALVGYGYTF  
CASTVAGVGQPQHF  
CASSLSWLAGGGEQFF  
CASSQEQLAGPEQYF  
CASSPTTSPNQETQYF

CASLDRPNTEAFF