

Supplemental Text

Supplemental Table 1: 12 melanoma peptide (12-MP) vaccine composition		
Allele	Sequence	Epitope
HLA-A1	DAEKSDICTDEY	Tyrosinase ₂₄₀₋₂₅₁ ^a
	SSDYVIPIGTY	Tyrosinase ₁₄₆₋₁₅₆
	EADPTGHSY	MAGE-A1 ₁₆₁₋₁₆₉
	EVDPIGHLY	MAGE-A3 ₁₆₈₋₁₇₆
HLA-A2	YMDGTMSQV	Tyrosinase ₃₆₉₋₃₇₇ ^b
	IMDQVPFSV	gp100 ₂₀₉₋₂₁₇ ^c
	YLEPGPVTA	gp100 ₂₈₀₋₂₈₈
HLA-A3/A11	GLYDGMEHL	MAGE-A10 ₂₅₄₋₂₆₂
	ALLAVGATK	gp100 ₁₇₋₂₅
	LIYRRRLMK	gp100 ₆₁₄₋₆₂₂
	SLFRAVITK	MAGE-A1 ₉₆₋₁₀₄
Tetanus peptide	ASGPGGGAPR	NY-ESO-1 ₅₃₋₆₂
	AQYIKANSKFIGITEL	Modified tetanus toxoid p2 ₈₃₀₋₈₄₄ ^d

^a substitution of S for C at residue 244
^b post-translational change of N to D at residue 371
^c 209-2M, substitution of M for T at residue 210
^d alanine residue added to prevent cyclization of the N-terminal glutamine

All peptides were synthesized directly from amino acids and purified under GMP conditions by Multiple Peptide Systems (now Polypeptide Group, San Diego, CA). Lyophilized peptides were reconstituted, mixed, and vialled under GMP conditions by Clinalfa (Merck Biosciences AG, Laufelfingen, Switzerland). The peptides were supplied as individual use vials of lyophilized peptide, one vial containing the 12MP mixture, and one containing the tetanus helper peptide. The vials of lyophilized peptide are stored at a temperature $\leq -70^{\circ}\text{C}$ and protected from light. Once thawed, the vial(s) were used for preparation of the vaccine within three hours. Quality-assurance/quality control testing of the mixtures included sterility, identity, purity, potency, general safety, pyrogenicity, and stability.

Supplemental Table 2. IFN γ -secreting cells per 100,000 CD8 T cells in peripheral blood (IVS ELISpot)

HLA Type	VMM	Arm	Pre-Treatment					Week 1					Week 2					Week 3					Week 5					Week 8					Week 11					Week 12					Resp?	
			Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD		
HLA-A1	VMM 325*	1	632	1,202	533	648	484	215	1,127	219	199	206	703	1,113	871	693	552	260	2,352	183	241	221	200	2,429	180	189	205	85	2,286	62	95	105	288	2,296	209	236	256	168	1,924	134	151	182	Yes	
	VMM 704	1	785	677	682	716	668	2,481	2,567	1,930	1,737	2,241	1,359	1,414	1,391	1,441	1,082	767	933	608	542	736	1,190	1,118	1,286	1,516	1,056	1,537	2,361	1,357	1,456	1,442	1,650	2,206	1,783	2,615	1,612	732	2,645	578	1,456	653	Yes	
	VMM 717*	1	3,179	3,136	2,972	3,203	2,628	2,694	2,909	2,455	2,173	2,776	2,673	2,604	2,356	2,397	2,251	2,701	3,534	2,263	2,169	2,281	1,189	1,018	1,046	1,228	1,090	1,119	4,629	985	1,020	1,091	657	6,920	564	649	582	1,206	6,785	1,137	1,252	1,151	Yes	
	VMM 734	1	19	35	8	20	18	246	195	159	242	227	95	76	29	51	80	210	183	148	178	166	145	179	160	168	157	288	305	285	336	265	72	73	25	36	34	108	127	114	147	126	No	
	VMM 769	1	972	1,014	1,007	1,062	1,143	1,108	1,108	907	1,085	1,380	1,044	1,171	831	948	1,133	1,036	1,170	948	935	1,052	1,648	1,584	1,689	1,754	1,461	816	2,228	680	1,079	1,154	1,094	2,795	1,209	1,389	978	X	X	X	X	X	Yes	
	VMM 680*	2	382	349	375	470	328	321	275	312	343	211	530	493	472	669	484	891	1,015	879	919	1,038	290	254	301	213	258	1,164	2,037	1,128	1,278	1,087	X	X	X	X	X	X	X	X	X	No		
	VMM 851	2	4,417	4,790	4,576	5,125	3,525	8,017	7,244	8,083	7,198	5,793	X	X	X	X	X	1,198	1,104	1,512	1,461	980	2,171	1,987	1,951	1,830	1,665	400	11,123	479	829	468	X	X	X	X	X	X	X	X	X	Yes		
	VMM 672	3	114	108	116	82	130	656	525	401	466	575	470	2,889	283	374	282	421	5,787	284	375	524	3,487	5,171	3,451	3,271	2,839	598	4,443	353	525	526	495	4,946	513	596	385	X	X	X	X	X	Yes	
	VMM 770	3	312	437	324	344	430	351	1,123	472	500	407	527	1,692	522	646	640	505	1,054	546	536	635	293	698	307	309	369	654	1,024	641	753	969	1,031	1,752	952	1,153	1,018	743	1,115	810	787	1,566	Yes	
	VMM 696*	4	364	340	411	346	262	1,211	1,062	1,207	1,246	964	199	182	131	142	160	832	2,519	690	727	594	1,132	2,342	1,134	1,120	956	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Yes		
HLA-A2	VMM 325*	1	803	789	968	917	1,004	340	370	518	369	1,129	820	706	944	905	825	430	453	416	418	639	339	348	342	351	477	276	298	343	257	647	407	612	407	439	642	331	375	291	357	411	Yes	
	VMM 717*	1	1,404	1,468	3,292	2,220	1,405	1,648	1,531	2,949	1,762	1,624	1,059	1,083	2,254	1,592	974	1,084	853	1,279	1,364	1,190	646	677	1,494	610	614	625	3,525	3,182	957	661	429	2,450	3,671	833	440	634	1,824	5,007	808	837	Yes	
	VMM 724	1	278	316	2,650	282	302	440	395	2,676	483	488	244	265	3,700	254	331	564	500	2,682	640	588	244	249	4,432	235	250	270	441	3,917	312	499	X	X	X	X	X	X	X	X	X	No		
	VMM 750	1	673	597	735	512	789	578	557	1,336	615	505	398	353	337	419	354	846	946	2,488	957	787	614	571	988	569	611	X	X	X	X	X	367	5,435	5,014	351	722	192	1,971	2,137	179	1,353	Yes	
	VMM 680*	2	956	798	849	963	849	670	419	489	480	554	908	768	1,013	841	950	1,260	1,149	1,002	815	1,095	1,050	1,185	1,384	1,143	946	602	907	2,743	636	526	X	X	X	X	X	X	X	X	X	Yes		
	VMM 689	2	480	362	253	358	282	616	621	459	776	633	847	806	776	666	696	937	865	695	999	941	927	916	846	716	731	433	3,993	2,775	493	1,652	X	X	X	X	X	X	X	X	Yes			
	VMM 764	2	1,706	1,679	1,419	1,427	1,565	396	390	447	353	341	1,678	1,397	1,411	1,482	1,425	2,145	1,746	1,641	1,637	1,583	1,509	1,250	1,275	1,287	1,239	480	491	381	490	526	234	206	245	240	251	2,223	8,089	2,026	1,641	2,490	Yes	
	VMM 793	2	651	643	638	591	358	766	756	718	651	612	867	860	701	694	633	984	951	1,004	805	706	678	584	709	537	655	1,404	2,723	2,580	1,190	2,514	702	2,170	1,389	629	1,258	773	6,254	2,646	659	1,174	Yes	
	VMM 831	2	1,683	1,296	1,441	1,579	1,291	1,307	1,134	1,136	1,231	937	861	910	1,117	866	1,222	710	4,508	2,347	649	810	1,333	1,279	1,340	1,283	1,128	2,531	2,252	3,275	2,233	2,626	559	544	1,177	544	529	1,314	1,323	2,639	1,307	1,525	Yes	
	VMM 695	3	409	385	327	384	352	8,462	5,903	6,203	7,013	6,606	3,484	3,655	2,857	2,967	2,982	1,437	8,127	1,138	1,197	1,239	2,531	2,887	2,481	2,185	2,335	1,661	1,625	1,249	1,374	1,422	1,640	4,720	1,401	1,450	1,437	1,716	1,878	1,295	1,583	1,409	Yes	
	VMM 720**	3	3,062	2,396	2,456	2,959	2,697	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1,341	1,506	5,010	1,635	1,378	1,690	6,539	5,445	2,106	1,616	2,013	4,787	3,369	2,165	1,640	Yes
	VMM 733	3	273	261	239	293	336	31,993	30,199	29,419	28,721	29,037	3,129	2,983	7,707	2,704	2,601	3,165	2,892	3,565	2,882	2,823	2,181	2,142	5,641	1,957	1,965	7,971	7,005	10,103	7,186	6,244	5,411	6,356	13,853	4,718	4,536	X	X	X	X	X	Yes	
	VMM 763	3	10,464	15,450	15,310	9,860	8,458	25,699	27,778	26,619	24,122	21,876	22,425	25,038	23,191	21,482	19,485	6,253	5,654	6,971	6,107	5,416	20,353	20,289	17,163	19,786	17,923	X	X	X	X	X	2,596	5,593	3,297	2,374	2,976	3,967	5,525	5,536	2,926	2,871	No	
	VMM 848	3	3,908	3,511	3,902	3,165	3,096	3,989	4,036	3,929	3,589	3,347	756	4,060	704	708	595	3,693	3,708	5,688	3,306	3,419	3,805	4,097	4,259	3,662	3,058	830	936	2,365	829	624	X	X	X	X	X	X	X	X	Yes			
	VMM 696*	4	557	607	681	804	547	958	771	825	1,117	1,040	187	178	602	237	173	691	667	1,499	897	756	1,060	954	2,341	1,104	965	X	X	X	X	X	X	X	X	X	X	X	X	X	Yes			
	VMM 705	4	151	124	63	67	72	347	281	155	181	209	426	966	2,509	73	498	362	1,079	1,714	107	911	306	262	553	333	275	473	1,041	345	83	503	234	268	220	50	90	229	622	506	77	225	Yes	
	VMM 707	4	397	387	439	336	297	272	231	6,867	194	218	165	1,434	5,891	121	326	254	3,688	3,137	213	2,962	211	2,458	4,772	163	1,502	158	2,847	3,005	114	670	271	3,303	3,568	231	1,085	175	2,199	1,750	173	695	Yes	
	VMM 714	4	1,888	1,690	1,531	1,496	1,463	554	587	624	480	465	891	711	696	730	709	2,728	2,293	2,168	2,127	2,092	1,905	1,536	1,495	1,572	1,545	1,484	1,061	1,340	1,292	1,869	299											

Supplemental Table 3. IFN γ -secreting cells per 100,000 CD8 T cells in peripheral blood (Direct ELISpot)

HLA Type	VMM	Arm	Pre-Treatment					Week 1					Week 2					Week 3					Week 5					Week 8					Week 11					Week 12					Resp?
			Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	Control	DAEK	EAD	EVD	SSD	
HLA-A1	VMM 325*	1	18.3	12.2	10.3	27.2	24.0	8.4	7.1	12.0	17.3	7.6	7.7	12.5	6.9	11.6	5.6	24.0	29.3	24.5	23.6	26.7	10.9	11.4	18.9	25.6	9.5	4.4	8.2	7.3	4.8	3.4	12.4	12.8	9.1	16.1	10.7	10.4	3.6	5.2	10.9	7.8	No
	VMM 704	1	14.3	17.7	2.7	27.2	15.6	5.0	10.6	16.3	10.6	2.8	2.0	6.0	2.7	4.7	2.7	10.1	12.7	7.4	22.8	2.7	3.5	10.6	16.2	27.5	4.9	3.6	4.2	4.2	1.2	2.4	8.7	7.9	7.1	10.3	7.9	6.5	9.4	7.9	6.5	1.4	Yes
	VMM 717*	1	9.3	11.9	14.4	14.4	16.5	7.7	12.8	7.3	10.8	13.1	3.4	5.7	5.3	9.5	3.4	8.4	8.4	9.1	10.5	7.6	6.9	10.9	10.5	18.5	18.1	8.3	13.6	9.5	16.6	6.0	11.3	15.2	12.1	20.2	14.2	X	X	X	X	X	No
	VMM 734	1	17.3	28.2	33.1	29.6	25.2	6.5	7.5	7.0	15.4	14.9	5.2	9.0	5.7	10.9	8.1	7.0	18.7	19.3	26.3	29.3	4.0	14.5	17.0	18.5	15.5	3.5	11.1	13.7	12.1	10.1	12.2	16.5	13.8	17.6	13.3	10.1	7.4	19.7	17.5	7.4	Yes
	VMM 769	1	1,042.0	1,142.4	984.0	980.4	1,058.1	1,121.8	1,054.4	1,043.6	954.6	1,020.3	901.6	1,038.2	916.0	767.1	989.9	1,225.3	1,155.2	1,244.8	1,213.7	1,092.9	487.0	502.9	501.9	520.2	491.3	1,180.7	1,164.6	1,323.3	1,057.0	1,132.3	122.4	172.7	178.2	161.7	155.3	X	X	X	X	X	No
	VMM 680*	2	28.9	27.8	36.7	37.8	33.4	8.1	16.2	17.2	15.2	20.3	6.8	11.3	7.9	20.3	22.6	32.4	47.8	48.7	66.6	37.6	2.6	13.2	29.0	28.1	7.9	16.9	38.6	32.2	54.7	39.4	59.6	122.3	160.8	120.0	105.1	2.7	8.1	12.7	25.3	8.1	Yes
	VMM 851	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	NA		
	VMM 672	3	5.2	4.0	7.5	2.9	3.5	2.3	1.4	2.3	2.7	1.8	2.0	3.5	3.0	1.5	0.5	4.9	4.4	2.4	3.4	5.4	1.5	5.5	3.5	2.5	3.5	4.5	5.0	3.0	3.5	6.5	3.2	2.1	1.6	3.2	1.6	4.8	1.1	2.7	2.7	3.7	No
	VMM 770	3	184.8	144.6	190.0	135.6	127.0	54.9	28.4	38.5	54.0	52.2	92.4	94.9	79.6	105.3	91.2	790.1	701.6	790.1	706.6	788.0	233.0	231.3	194.6	189.7	196.7	542.2	561.8	528.3	519.2	544.5	524.2	524.8	566.2	518.8	518.8	261.9	306.4	347.7	305.7	302.0	No
	VMM 696*	4	5.1	6.2	6.2	13.1	8.4	5.6	9.6	9.0	15.5	8.7	5.2	9.1	9.9	12.3	7.2	15.5	9.9	13.8	18.5	8.6	6.7	10.6	9.4	17.7	9.0	1.5	2.2	2.2	2.2	0.0	7.8	5.3	11.0	12.7	7.4	X	X	X	X	X	No
HLA-A2			Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	Control	GLY	IMD	YLE	YMD	
	VMM 325*	1	5.0	20.7	17.9	10.3	10.8	9.7	3.1	5.3	3.6	6.7	2.9	7.7	6.9	3.9	2.2	9.6	13.6	16.6	7.4	12.2	10.1	4.3	3.8	2.4	3.3	4.6	6.4	5.2	5.8	3.2	4.7	274.9	14.4	8.3	5.4	3.6	2.1	4.7	5.7	4.7	No
	VMM 717*	1	9.3	10.6	9.3	9.8	8.5	7.7	8.1	7.3	12.0	4.6	3.4	7.6	4.9	9.8	6.8	8.4	8.4	8.0	6.9	7.3	6.9	8.7	6.9	5.4	5.1	8.3	9.8	9.8	4.2	4.2	11.3	16.7	14.2	14.9	14.9	X	X	X	X	X	No
	VMM 750	1	8.6	9.2	4.6	13.7	6.9	7.7	26.8	15.3	15.3	14.0	12.7	11.0	12.7	18.0	19.7	22.6	20.8	28.1	17.7	22.6	6.6	19.3	11.5	12.1	7.9	9.2	21.0	26.3	13.8	9.9	20.8	35.4	15.3	24.3	17.3	10.8	28.9	22.9	19.3	11.4	No
	VMM 724	1	11.4	19.1	28.2	8.8	11.9	9.3	12.7	20.0	9.3	7.8	6.4	12.2	21.3	8.0	14.4	12.4	10.2	22.6	13.5	8.6	4.1	6.7	19.1	6.2	7.2	8.0	5.7	34.7	13.1	13.1	14.1	18.2	38.5	10.4	20.8	15.7	30.4	42.8	12.5	11.9	No
	VMM 680*	2	28.9	35.6	17.8	42.3	12.2	8.1	9.1	5.1	11.2	2.0	6.8	13.6	3.4	7.9	4.5	32.4	52.1	32.4	42.7	16.2	2.6	15.8	8.8	11.4	2.6	16.9	27.3	21.7	27.3	7.2	59.6	125.5	82.3	92.5	33.7	2.7	4.5	4.5	13.6	3.6	No
	VMM 689	2	22.6	5.6	9.0	14.1	9.0	22.4	32.2	21.3	19.6	16.1	22.2	12.8	16.3	12.3	18.7	29.2	21.9	30.5	29.2	40.8	11.5	33.1	22.6	15.2	12.6	10.3	21.2	22.9	16.0	16.6	10.1	59.4	41.4	20.2	27.4	10.0	37.8	25.0	10.7	10.7	Yes
	VMM 764	2	10.2	22.0	11.0	10.2	10.2	16.0	10.6	20.6	18.6	14.6	7.5	20.3	12.2	8.1	11.6	18.3	28.3	13.3	10.5	21.6	11.7	26.3	22.8	21.6	14.0	12.3	12.3	9.7	5.8	16.8	21.0	20.4	17.4	14.4	18.0	27.5	14.7	8.7	17.4	6.7	No
	VMM 793	2	24.6	28.8	29.5	20.4	21.8	34.0	26.3	30.8	34.0	32.7	46.3	45.7	47.0	51.9	42.2	52.5	55.6	68.1	44.6	57.2	29.0	33.4	29.6	35.2	31.5	14.2	13.5	12.8	18.9	16.9	749.7	686.3	715.8	717.3	726.6	94.9	74.6	78.3	77.4	95.8	No
	VMM 831	2	365.0	368.1	382.7	388.9	378.9	377.1	403.8	451.3	420.9	397.9	44.2	48.5	59.3	33.9	48.5	80.9	80.4	87.5	88.2	69.1	46.8	71.6	91.7	68.8	66.8	29.2	20.7	33.4	41.4	42.6	25.5	25.5	22.3	28.7	16.7	155.6	144.4	171.0	137.5	160.6	No
VMM 695	3	97.8	86.5	83.3	107.4	68.9	74.4	55.2	33.6	33.6	55.2	36.2	45.8	32.5	30.1	42.2	137.1	130.6	96.7	113.6	83.6	121.9	115.7	115.7	51.0	89.6	59.3	62.6	40.6	30.8	45.0	93.8	114.5	97.5	103.6	104.8	126.6	75.0	62.1	59.8	62.1	No	
VMM 720**	3	12.5	13.5	10.8	10.8	11.4	X	X	X	X	X	16.2	15.0	12.8	10.0	12.8	10.6	11.5	9.0	12.2	12.8	3.0	6.0	0.0	0.0	0.0	20.8	23.0	46.5	13.7	14.8	11.3	17.7	18.7	8.8	10.3	X	X	X	X	X	Yes	
VMM 733	3	5.4	2.6	10.2	7.6	4.7	X	X	X	X	X	9.6	12.5	13.1	0.0	16.1	X	X	X	X	X	6.6	6.3	13.6	5.7	8.8	13.2	9.9	19.3	1.9	12.5	11.4	4.2	13.6	5.1	6.7	X	X	X	X	X	No	
VMM 763	3	15.2	17.1	21.0	13.3	11.4	4.4	7.8	4.4	8.9	3.3	3.5	8.7	9.6	11.3	13.1	23.2	28.0	24.5	25.2	32.1	2.7	6.3	5.4	4.5	1.8	63.7	69.3	62.1	57.4	68.5	39.2	36.9	48.7	45.3	43.1	58.2	87.4	72.4	60.5	74.7	No	
VMM 848	3	68.4	78.4	80.8	80.0	81.6	96.5	119.1	105.0	120.6	120.6	734.1	679.3	747.4	762.5	731.3	126.5	119.4	146.6	145.4	131.2	55.1	44.3	51.8	51.8	55.1	X	X	X	X	X	21.2	42.4	31.0	37.5	39.1	227.7	254.6	250.2	258.9	223.0	No	
VMM 696*	4	5.1	7.3	8.4	8.8	5.1	5.6	4.0	5.9	3.1	3.4	5.2	13.1	6.0	6.8	0.8	15.5	9.5	9.9	6.5	0.9	6.7	6.7	10.6	10.6	3.9	1.5	1.5	1.5	4.5	0.0	7.8	5.3	7.0	9.8	4.5	X	X	X	X	X	No	
VMM 705	4	23.1	26.8	29.9	27.6	21.9	20.7	36.8	16.1	27.9	26.4	11.0	18.6	53.3	10.7	11.0	17.5	49.3	102.1	19.9	29.1	23.1	39.0	32.6	25.8	30.3	11.2	15.6	21.3	14.1	10.1	15.0	9.4	20.6	12.7	21.4	17.2	20.3	26.9	16.8	11.7	Yes	
VMM 707	4	13.2	19.8	18.0	17.5	18.9	10.7	27.1	22.8	16.0	11.6	4.2	12.6	7.9	5.3	5.3	26.4	22.0	21.0	11.2	21.0	7.9	14.4	11.9	11.9	2.0	6.3	21.4	9.4	16.7	10.5	20.6	29.5	32.9	16.7	16.2	23.0	27.2	27.2	18.8	17.2	No	
VMM 714	4	4.7	13.9	5.6	5.9	4.7	X	X	X	X	X	7.1	15.0	11.7	9.0	8.8	10.5	15.7	9.7	8.5	12.7																						

Supplemental Table 4. IFN γ -secreting cells per 100,000 CD4 T cells in peripheral blood (Direct ELISpot)

VMM	Arm	Pre-Treatment		Week 1		Week 2		Week 3		Week 5		Week 8		Week 11		Week 12		Resp?
		Control	Tet	Control	Tet	Control	Tet	Control	Tet	Control	Tet	Control	Tet	Control	Tet	Control	Tet	
VMM 325	1	10.1	23.0	4.9	14.7	4.8	<u>25.4</u>	14.5	26.4	6.3	19.6	2.3	<u>27.9</u>	8.6	23.6	6.1	<u>82.2</u>	Yes
VMM 704	1	5.2	4.7	1.6	1.6	0.8	0.5	3.6	1.7	1.5	3.9	1.7	9.5	2.4	10.0	2.2	<u>140.5</u>	Yes
VMM 717	1	7.2	11.4	8.1	5.7	3.4	8.0	8.9	8.5	8.0	16.5	8.4	14.9	13.6	19.6	X	X	No
VMM 724	1	5.3	7.4	4.8	5.3	2.9	5.3	5.5	4.7	2.0	2.7	3.2	<u>39.5</u>	6.8	<u>34.9</u>	7.7	<u>109.7</u>	Yes
VMM 734	1	9.5	8.7	3.7	6.6	3.4	6.2	3.4	8.8	2.3	4.6	2.0	7.5	6.8	9.8	5.9	5.6	No
VMM 750	1	3.7	4.0	2.8	2.6	5.5	7.0	9.1	6.9	2.7	2.9	3.2	<u>64.0</u>	8.3	23.1	4.6	19.3	Yes
VMM 769	1	4.5	1.9	7.0	3.6	3.7	2.8	9.4	3.9	4.9	3.0	0.2	2.5	5.2	5.0	X	X	No
VMM 680	2	5.7	4.6	2.0	3.9	1.5	2.0	7.8	10.9	0.6	2.6	4.3	<u>40.7</u>	14.5	<u>47.3</u>	0.6	8.0	Yes
VMM 689	2	8.4	6.1	9.2	8.5	8.0	5.5	9.2	15.5	4.9	6.5	3.6	<u>74.8</u>	3.7	<u>32.7</u>	3.0	20.9	Yes
VMM 702	2	19.4	17.6	14.1	10.1	8.3	7.2	36.4	23.5	X	X	23.7	27.7	24.8	20.7	21.1	26.7	No
VMM 764	2	2.8	5.1	5.4	7.3	2.8	5.4	7.8	7.8	4.3	5.3	4.9	8.3	8.1	8.5	8.3	4.3	No
VMM 793	2	7.7	9.5	12.1	14.0	15.4	24.0	16.5	30.7	11.1	12.6	5.2	<u>41.2</u>	236.0	291.2	35.8	<u>173.9</u>	Yes
VMM 831	2	151.8	154.0	194.0	224.9	32.1	43.3	34.1	66.5	15.5	28.6	16.2	<u>234.4</u>	12.5	<u>51.3</u>	84.2	<u>284.4</u>	Yes
VMM 851	2	9.9	12.2	4.6	4.8	X	X	4.5	5.9	7.7	7.7	129.8	<u>1329.2</u>	8.6	23.6	13.4	31.0	Yes
VMM 672	3	2.3	2.8	1.4	1.1	1.1	4.1	2.7	7.4	0.9	3.3	2.4	<u>25.7</u>	1.8	14.3	2.2	<u>329.0</u>	Yes
VMM 695	3	12.8	15.6	13.1	12.8	6.4	15.7	26.0	<u>85.6</u>	22.9	54.0	14.3	<u>197.0</u>	17.3	<u>200.9</u>	23.2	<u>230.6</u>	Yes
VMM 720	3	5.8	9.3	X	X	6.7	5.8	6.3	7.7	X	X	11.9	<u>403.3</u>	6.5	<u>198.4</u>	X	X	Yes
VMM 733	3	4.6	10.2	X	X	2.7	<u>27.3</u>	X	X	8.7	12.6	5.9	<u>57.4</u>	2.4	<u>24.2</u>	X	X	Yes
VMM 763	3	3.2	3.2	0.8	0.2	0.8	2.1	7.4	18.2	0.6	0.8	16.3	<u>45.8</u>	19.8	33.9	16.3	27.8	Yes
VMM 770	3	126.0	121.1	37.6	42.6	64.8	79.4	838.2	797.9	241.9	268.9	447.5	478.3	543.1	640.0	244.9	328.9	No
VMM 848	3	50.9	50.9	59.0	64.2	268.1	285.7	67.6	93.4	26.3	27.8	X	X	8.2	12.0	125.7	181.0	No
VMM 696	4	4.5	3.2	7.0	8.2	3.7	4.5	9.4	17.7	4.9	6.4	0.2	0.4	5.2	11.8	X	X	No
VMM 705	4	18.1	23.4	15.3	20.6	11.6	13.5	15.0	24.2	16.7	18.8	8.7	24.5	12.0	9.6	12.5	21.6	No
VMM 707	4	6.2	8.7	5.5	7.0	1.8	2.2	12.9	15.6	3.6	3.9	2.7	8.3	8.5	15.4	10.2	11.6	No
VMM 714	4	3.7	4.8	X	X	5.3	5.0	2.4	4.1	2.8	8.3	4.5	<u>115.4</u>	22.8	<u>393.6</u>	X	X	Yes
VMM 718	4	9.1	8.8	5.5	8.5	4.5	<u>29.7</u>	18.7	29.1	5.0	22.0	4.7	<u>209.6</u>	5.7	<u>220.5</u>	20.2	<u>650.6</u>	Yes
VMM 723	4	X	X	5.7	5.1	5.3	<u>43.8</u>	5.5	<u>34.6</u>	16.2	<u>92.1</u>	115.7	<u>417.6</u>	19.3	<u>182.4</u>	45.5	<u>298.8</u>	Yes
VMM 810	4	7.0	3.9	9.2	17.7	15.8	<u>43.0</u>	X	X	X	X	X	X	X	X	X	X	Yes

Tet = Tetanus helper peptide. Control = negative control (maximum of 2-3 negative controls. "X" marks samples not collected or not evaluable. Resp = Response. Samples meet criteria for T cell response when shown in **bold and underlined**.