

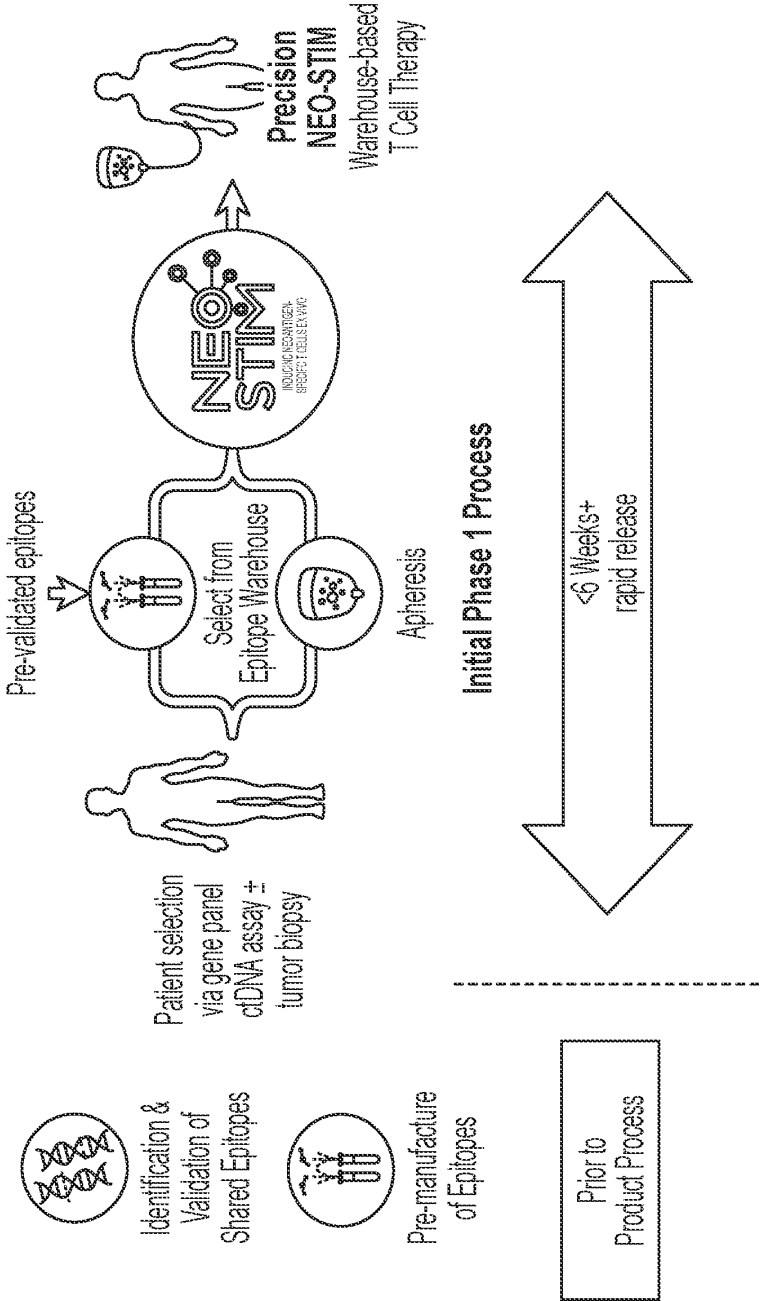


FIG. 1A

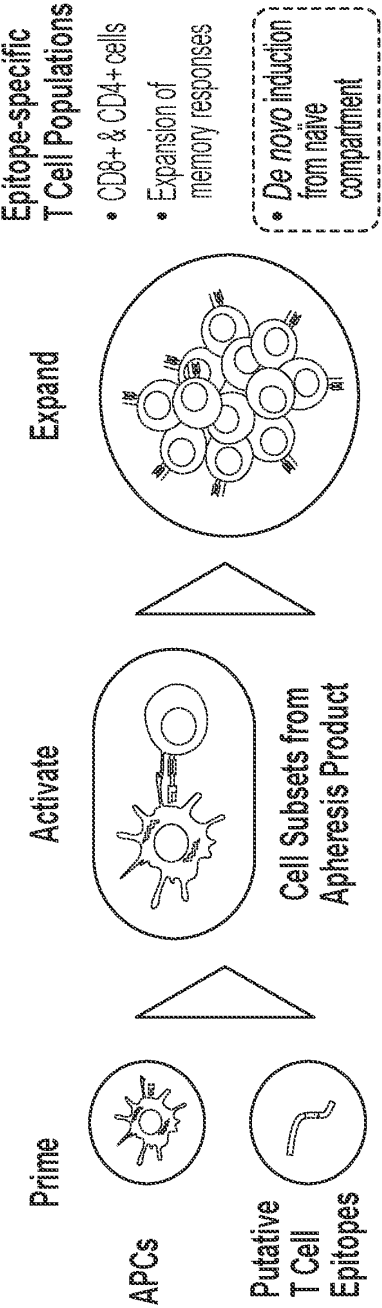


FIG. 1B

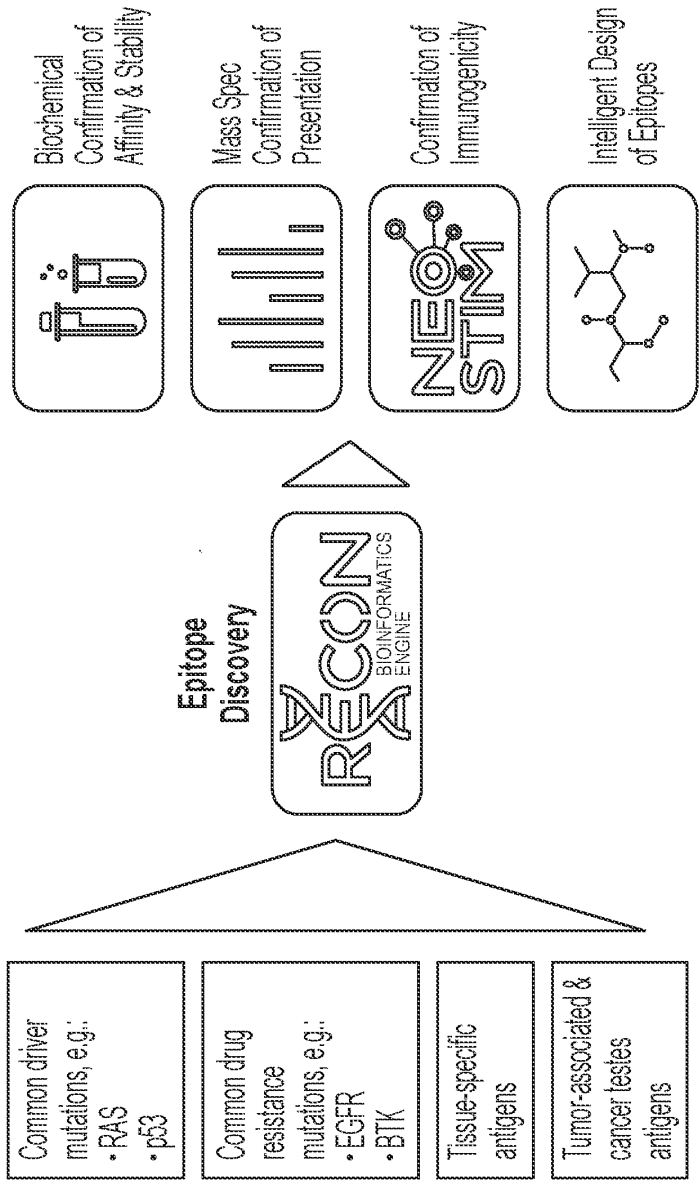


FIG. 2

Epitope	Allele	RECON % Rank	US Population Frequency	Validated as presented?
(v)wgaDvgk	A03:01	0.25, 1	21.8%	✓
	A11:01	0.17, 0.2	11.2%	✓
	A68:01	0.3	5.9%	✓
	A30:01	0.5	4.5%	
gaDvgksa(l)	C05:01	0.12	13.6%	
	C03:03	0.5	8.8%	
	C08:02	0.04, 0.8	7.5%	✓
	B35:03	0.8	2.8%	
Dvgksal	C08:01	0.6, 0.9	2.1%	
	B08:01	0.3	17.6%	
	B14:02	0.2	5.8%	
	C07:01	1	26.2%	
aDvgksal	B37:01	0.6	2.2%	
	C05:01	0.9	13.6%	

FIG. 3A

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Epitope	Allele	RECON % Rank	US Population Frequency	Validated as presented?
(v)wga/vgk	A03:01	0.12, 0.7	21.8%	✓
	A11:01	0.15, 0.15	11.2%	✓
	A68:01	0.25, 0.3	5.9%	✓
	A30:01	0.4	4.5%	
(g)la/vgk/sal	B07:02	1	20.5%	
	C03:04	0.8, 0.8	14.7%	
	C03:03	0.7	8.8%	
	C08:02	1	7.5%	
	B35:03	1	2.8%	
	B48:01	0.7	1.1%	
	B46:01	0.7	0.8%	
	B81:01	0.5	0.6%	
klwvga/vg	A02:01	0.5	42.7%	
	A02:07	0.9	0.6%	
lwvga/vg	B68:02	0.4	3.6%	
Vgvgk/sal	B08:01	1	17.6%	

FIG. 3B

Epitope	Allele	RECON % Rank	US Population Frequency	Validated as presented?
(v)wgaCgvgk	A03:01	0.25, 0.8	21.8%	✓
	A11:01	0.17, 0.3	11.2%	✓
	A68:01	0.4, 0.8	5.9%	✓
	A30:01	1	4.5%	

FIG. 3C

Epitope	Allele	RECON % Rank	US Population Frequency	Validated as presented?
(v)wgafRvgk	A03:01	0.13	21.8%	✓
	A11:01	0.25	11.2%	✓
	A68:01	0.4	5.9%	✓
	A30:01	0.8	4.5%	✓
(a)Rvgkksal	B14:02	0.9	5.8%	
	B27:05	0.6	4.9%	
	B38:01	0.9	3.5%	
	B39:01	0.4	1.8%	
	C07:01	0.4, 0.7	26.2%	
	C07:02	0.3	24.7%	
gaRvgkksa	B55:01	0.6	2.7%	
	B46:01	0.5	0.8%	
eyklvwgaR	A33:03	0.17	3.1%	

FIG. 3D

		pMHC Affinity (nM)	pMHC Stability (hr)	Mass Spec pMHC
RAS G12C RAS G12D RAS G12V		4.1	5.0	YES
		314.9	2.3	YES
		44.2	6.7	YES
RAS G12C RAS G12D RAS G12V		69.3	15.7	YES
		33.1	13.0	YES
		26.1	24.3	YES

FIG. 4

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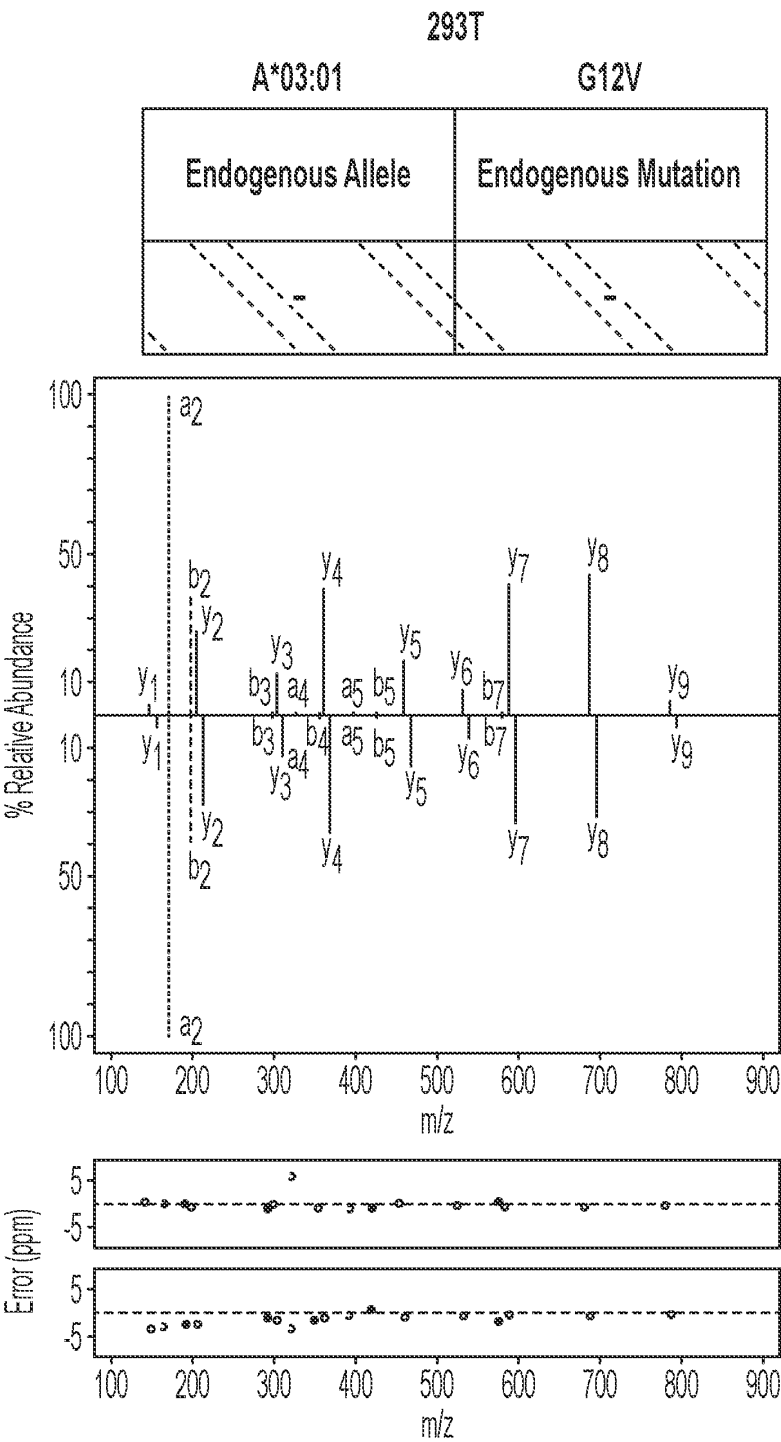


FIG. 5

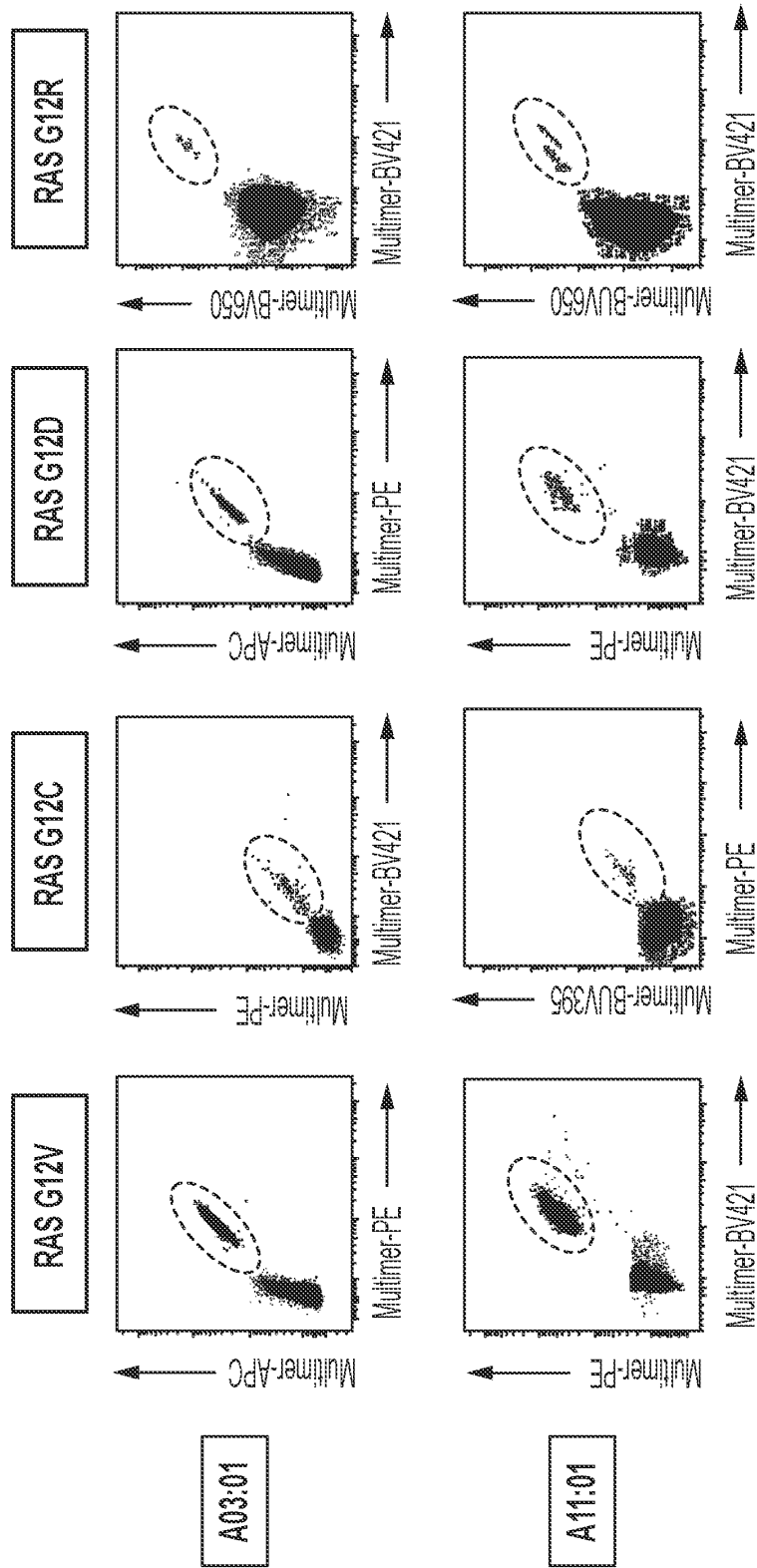


FIG. 6

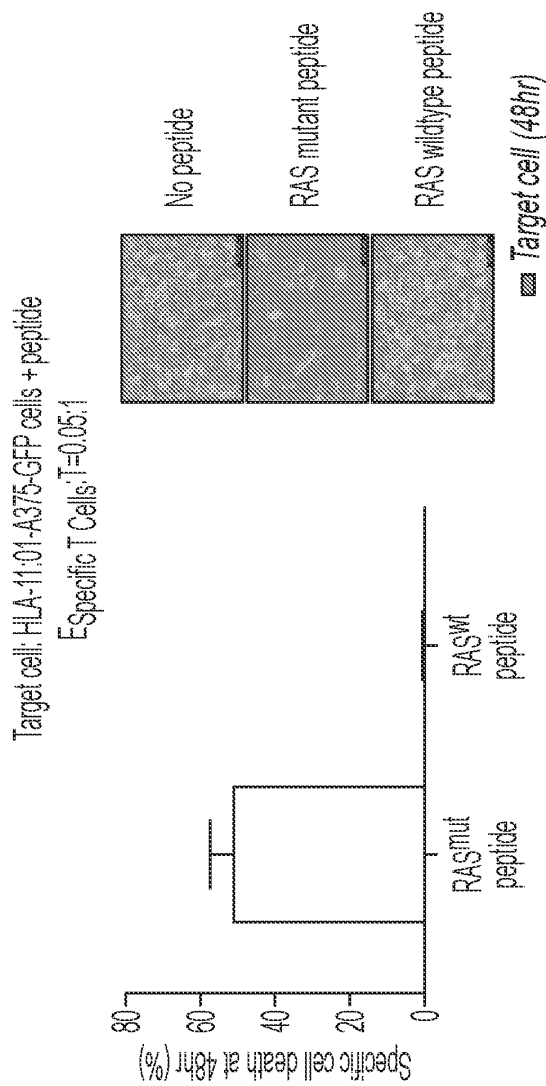


FIG. 7

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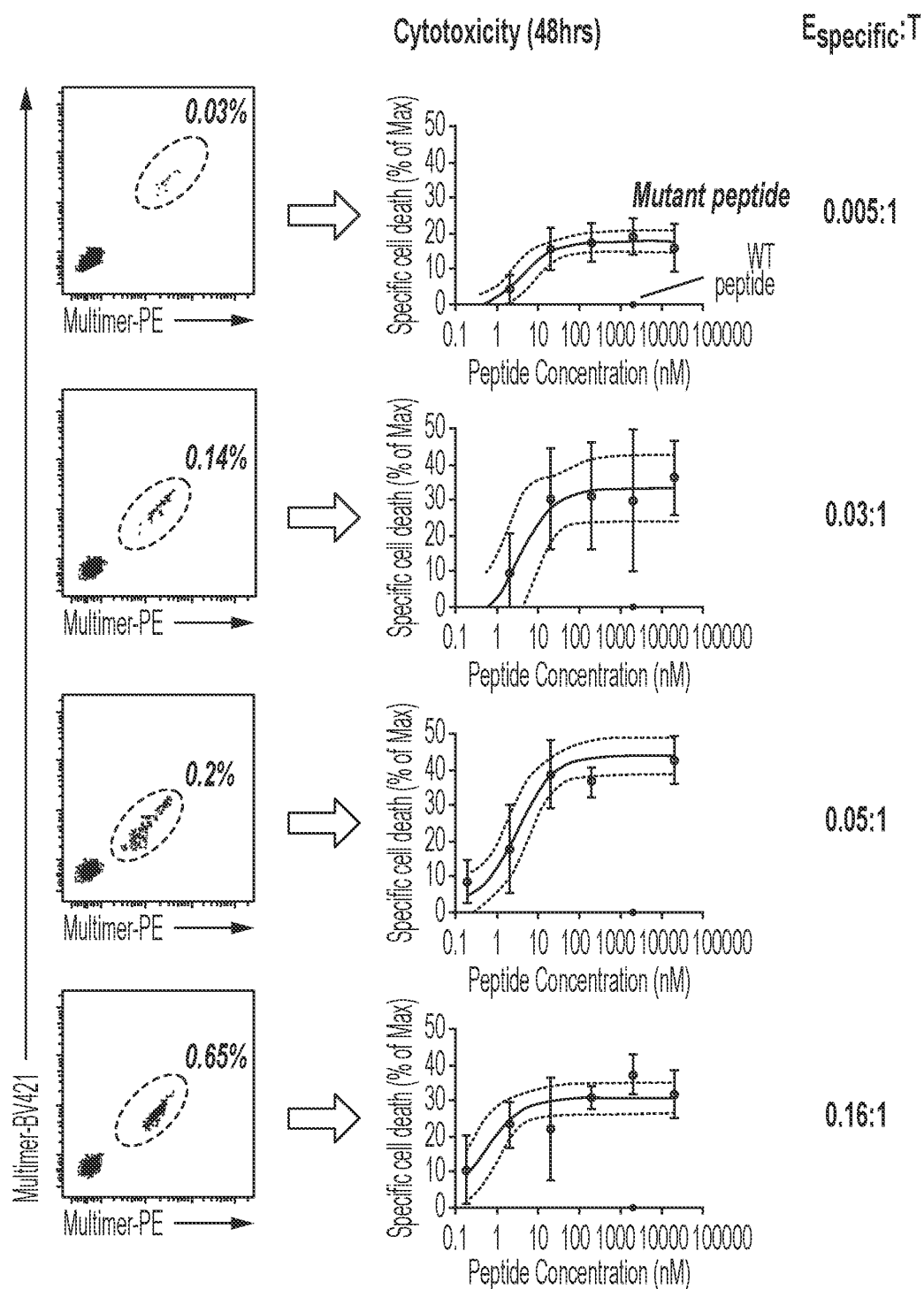
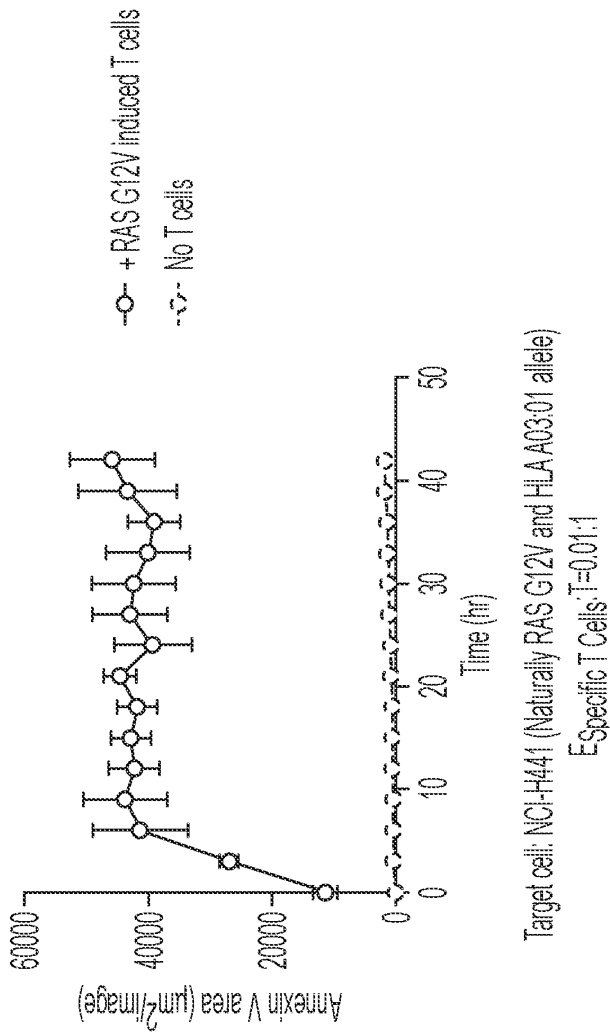


FIG. 8



Target cell: NCI-H441 (Naturally RAS G12V and HLA A03:01 allele)
E-Specific T Cells: T=0.01:1

FIG. 9

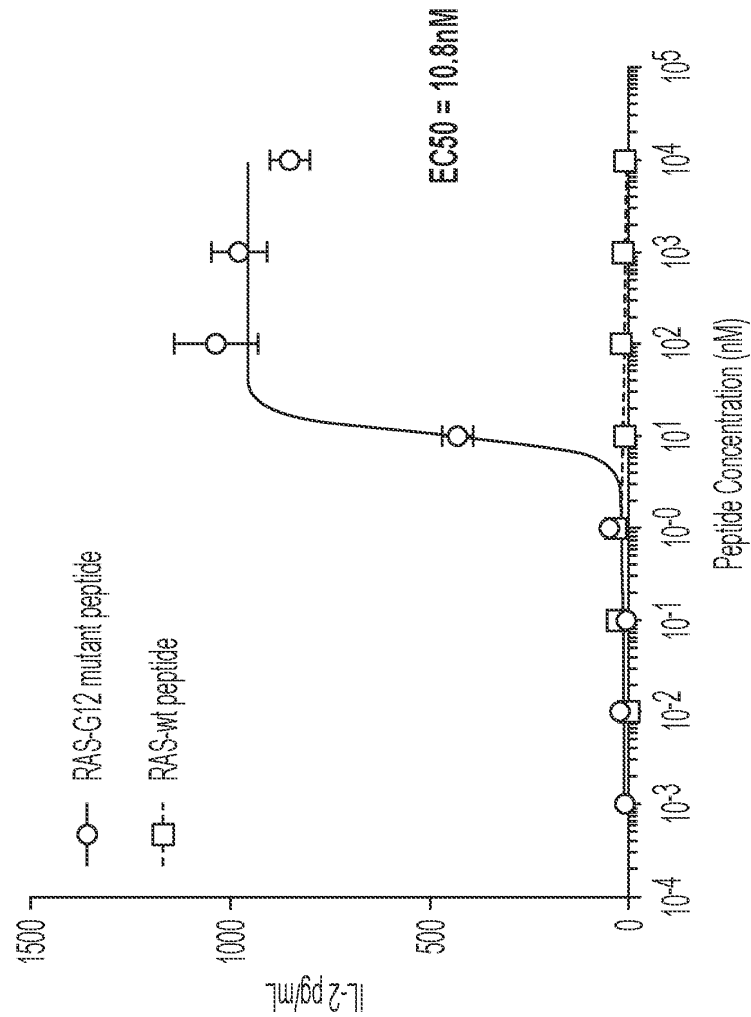


FIG. 10A

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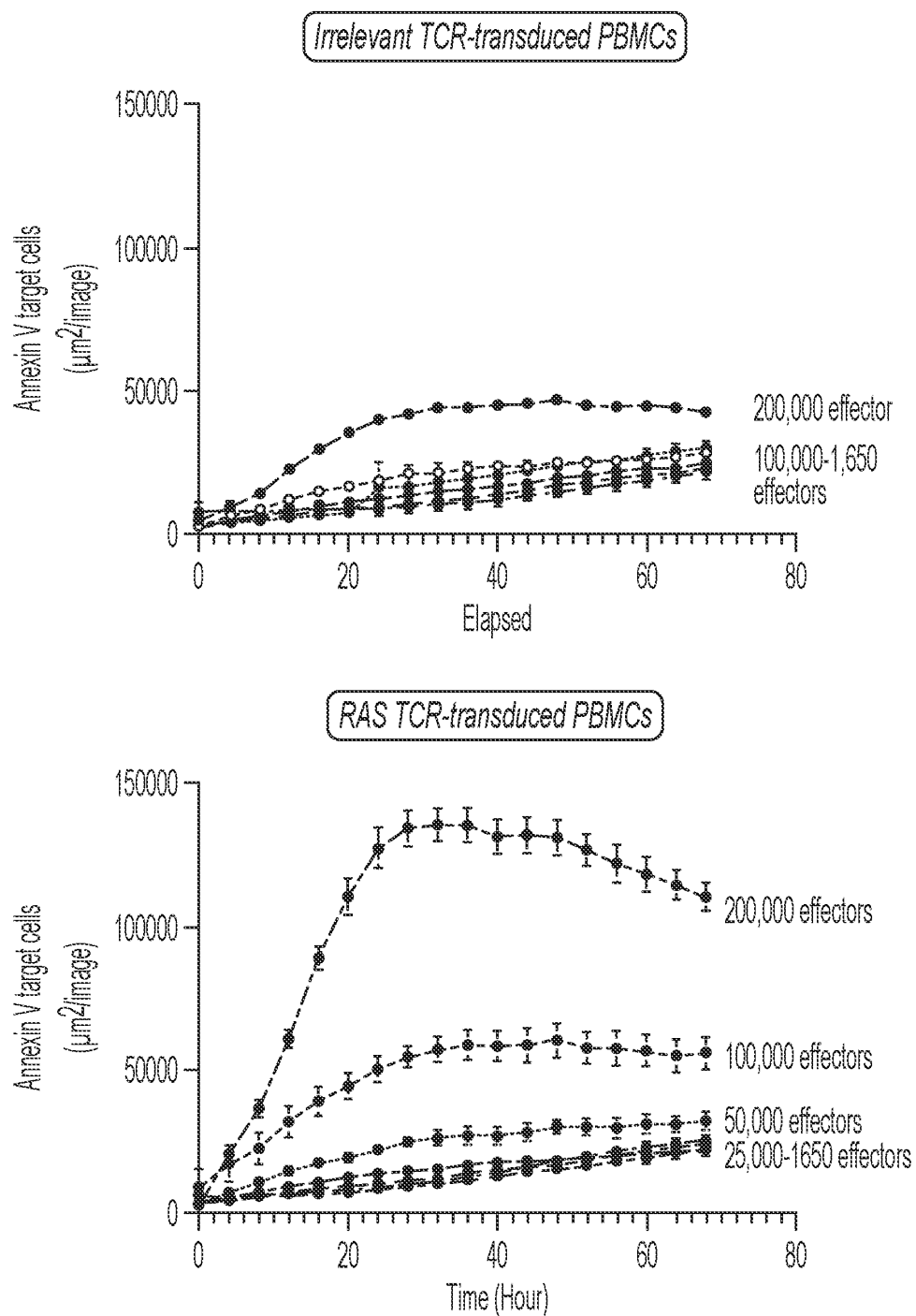


FIG. 10B

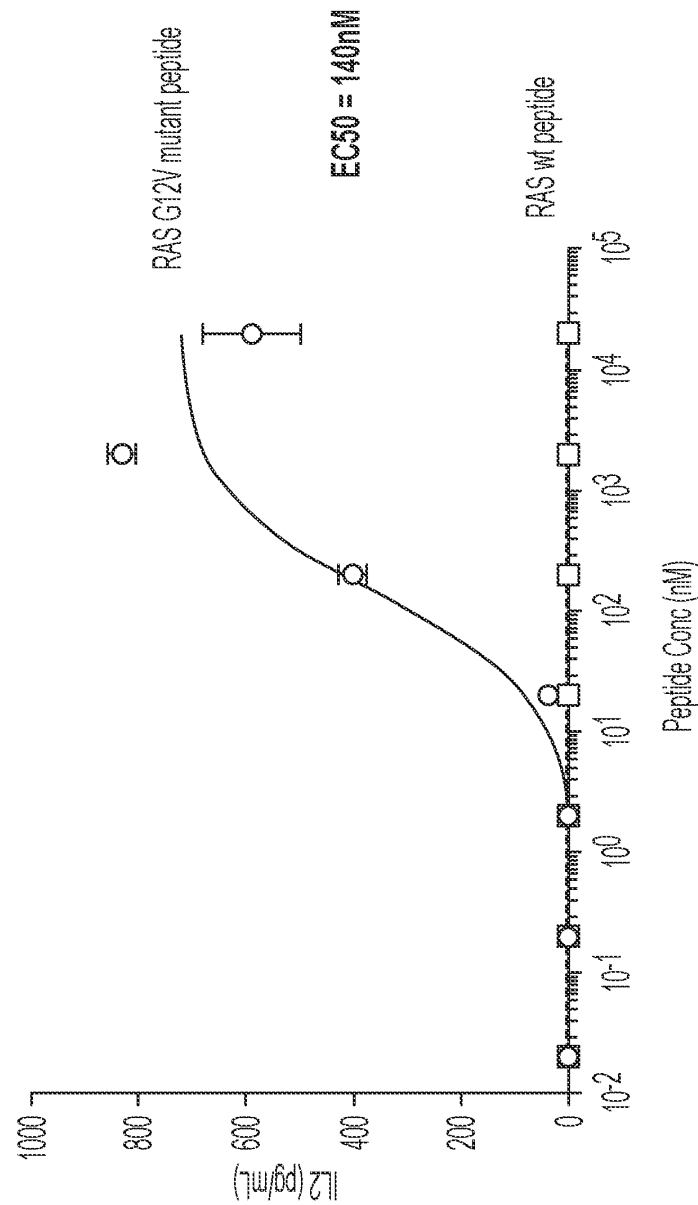


FIG. 10C

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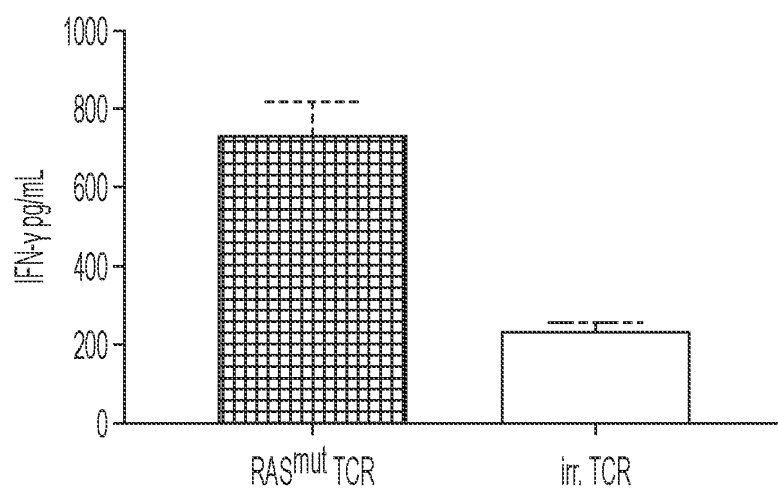
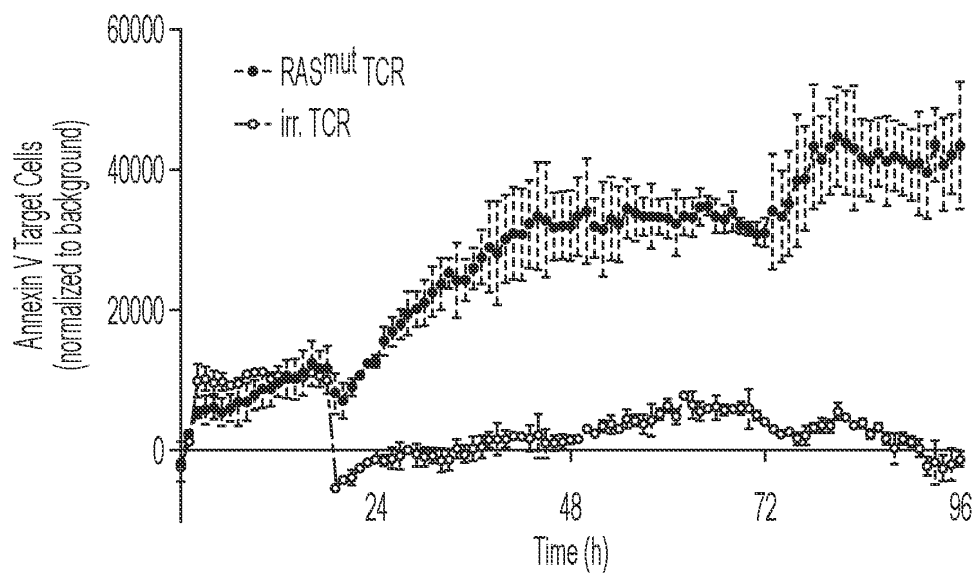


FIG. 10D

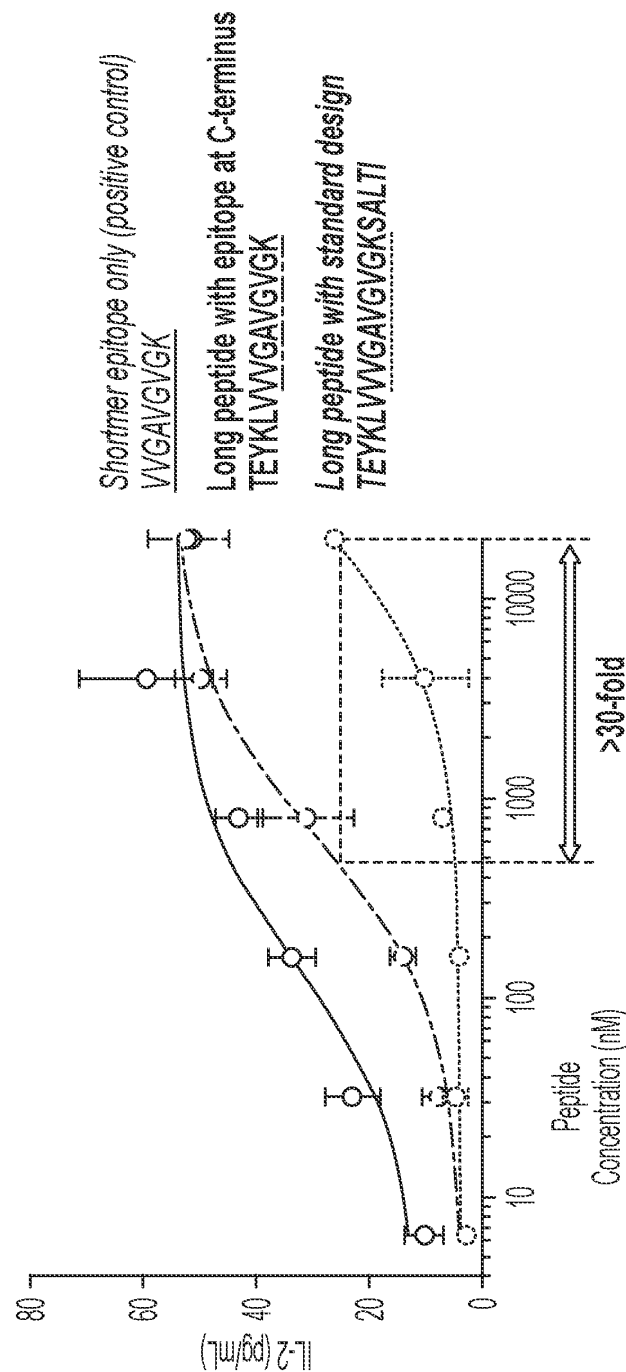


FIG. 11A

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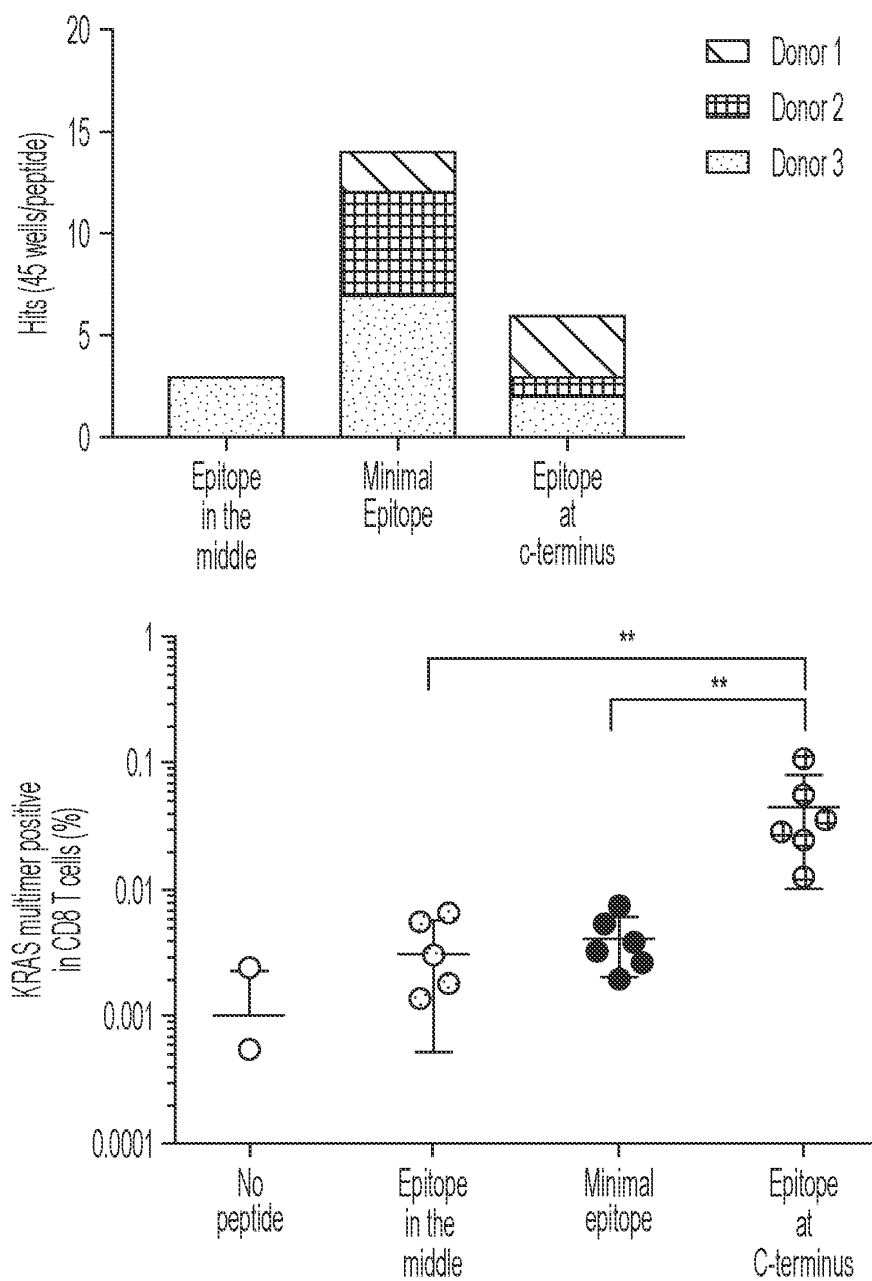


FIG. 11B