

Supplementary table 1. Top-ranked ROPN1/B peptides and their scores for immunogenicity, non-cross reactivity, HLA-A2 binding and immunogenicity.

PEPTIDE	Protein	Length	Source	PREDICTED IMMUNOGENICITY ^a				EXPITOPE ^b	HLA-A2 STABILIZATION ASSAYS			IMMUNOGENICITY		
				NetCTL pan	NetMHC pan	SYFPEITHI	RANKPEP	Cross-reactivity?	Min. binding	Amplitude	EC50	T cell response	TCR retrieval	Recognition ^c
EVIGPDGLITV	ROPN1B	11-mer	Eluted					No	1,569	1,120	6,65E-07	Yes	Yes	Yes
FLYTYIAKV	ROPN1	9-mer	Predicted /Eluted	1	1	1	1	No	1,561	1,062	1,34E-05	Yes	Yes	Yes
FLALACSAL	ROPN1/1B	9-mer	Predicted	3	11	5	6	No	1,304	0,855	4,84E-06	Yes	No	x
FLYTYIAEV	ROPN1B	9-mer	Predicted	1	1	1	1	No	1,423	0,855	2,08E-05	Yes	Yes	Yes
MLNYIEQEV	ROPN1B	9-mer	Predicted	6	2	12	12	No	1,399	0,800	5,22E-06	Yes	Yes	No
AQMWKVVNL	ROPN1/1B	9-mer	Predicted	2	2	19	38	No	1,292	0,773	1,05E-05	Yes	Yes	No
LIIRAEELAQM	ROPN1/1B	11-mer	Eluted					No	1,376	0,737	4,40E-06	Yes	No	x
FQFLYTYIA	ROPN1/1B	9-mer	Predicted	4	12	93	99	No	1,144	0,660	4,13E-06	Yes	No	x
KMLKEFAKA	ROPN1/1B	9-mer	Predicted	9	4	21	21	No	1,244	0,607	6,64E-08	No	x	x
ALACSALGV	ROPN1/1B	9-mer	Predicted	6	9	2	5	No	1,157	0,567	2,84E-06	No	x	x
KTLKIVCEV	ROPN1/1B	9-mer	Predicted	5	6	7	16	No	1,263	0,526	9,50E-05	Yes	x	x
YIAEVDGEI	ROPN1B	9-mer	Predicted	8	10	6	8	No	1,409	0,807	x	x	x	x
LPRIPFSTF	ROPN1B	9-mer	Eluted					No	1,141	0,380	x	x	x	x
GVTITKTLK	ROPN1/1B	9-mer	Eluted					No	1,184	0,489	x	x	x	x
HVSRMLNYI	ROPN1B	9-mer	Predicted	16	26	30	7	No	1,092	x	x	x	x	x
GLPRIPFSTF	ROPN1B	9-mer	Eluted					No	1,066	x	x	x	x	x
AELTPELLKI	ROPN1/1B	10-mer	Eluted					No	1,049	x	x	x	x	x
MLNYMEQEV	ROPN1	9-mer	Predicted	8	3	12	10	No	0,941	x	x	x	x	x
SALGVITIK	ROPN1/1B	9-mer	Eluted					No	0,921	x	x	x	x	x
RLIIRAEEL	ROPN1/1B	9-mer	Predicted	12	7	3	14	No	0,913	x	x	x	x	x
ELAQMWKVV	ROPN1/1B	9-mer	Predicted	48	32	25	9	No	x	x	x	x	x	x
EICASHVSR	ROPN1B	9-mer	Eluted					No	x	x	x	x	x	x
EVIGPDGIITV	ROPN1	11-mer	Eluted					No	x	x	x	x	x	x
LPTDLFNSVM	ROPN1/1B	10-mer	Eluted					No	x	x	x	x	x	x
TVNDFQNP	ROPN1/1B	10-mer	Eluted					No	x	x	x	x	x	x
VDGEISASH	ROPN1	9-mer	Eluted					No	x	x	x	x	x	x
DLFNSVMNV	ROPN1/1B	9-mer	Predicted	7	5	4	2	Yes		x	x			
ELTPELLKI	ROPN1/1B	9-mer	Predicted	18	8	6	4	Yes		x	x			
LLKILHSQV	ROPN1/1B	9-mer	Predicted	13	18	9	8	Yes		x	x			
LTPPELLKIL	ROPN1/1B	9-mer	Predicted	49	34	8	34	Yes		x	x			

TITKTLKIV	ROPN1/1B	9-mer	Predicted	35	26	20	3	Yes	x	x
WAADYFEAL	ROPN1	9-mer	Predicted	10	23	22	41	Yes	x	x
EISASHVSR	ROPN1	9-mer	Eluted					Yes	x	x
FTQNPRVWL	ROPN1B	9-mer	Eluted					Yes	x	x
LPTDLFNSV	ROPN1/1B	9-mer	Eluted					Yes	x	x
SPRIPFSTF	ROPN1	9-mer	Eluted					Yes	x	x

^a Peptides were identified with *in silico* scores (provided as ranks) and immunopeptidomics.

^b Peptides were assessed for potential cross-reactivity using Expitope software. Peptides showing overlap with other human peptides up to 2 amino acid mismatches were excluded.

^c Recognition of endogenously processed peptide assessed by co-culture of TCR T-cells with TNBC cells expressing ROPN1/1B.