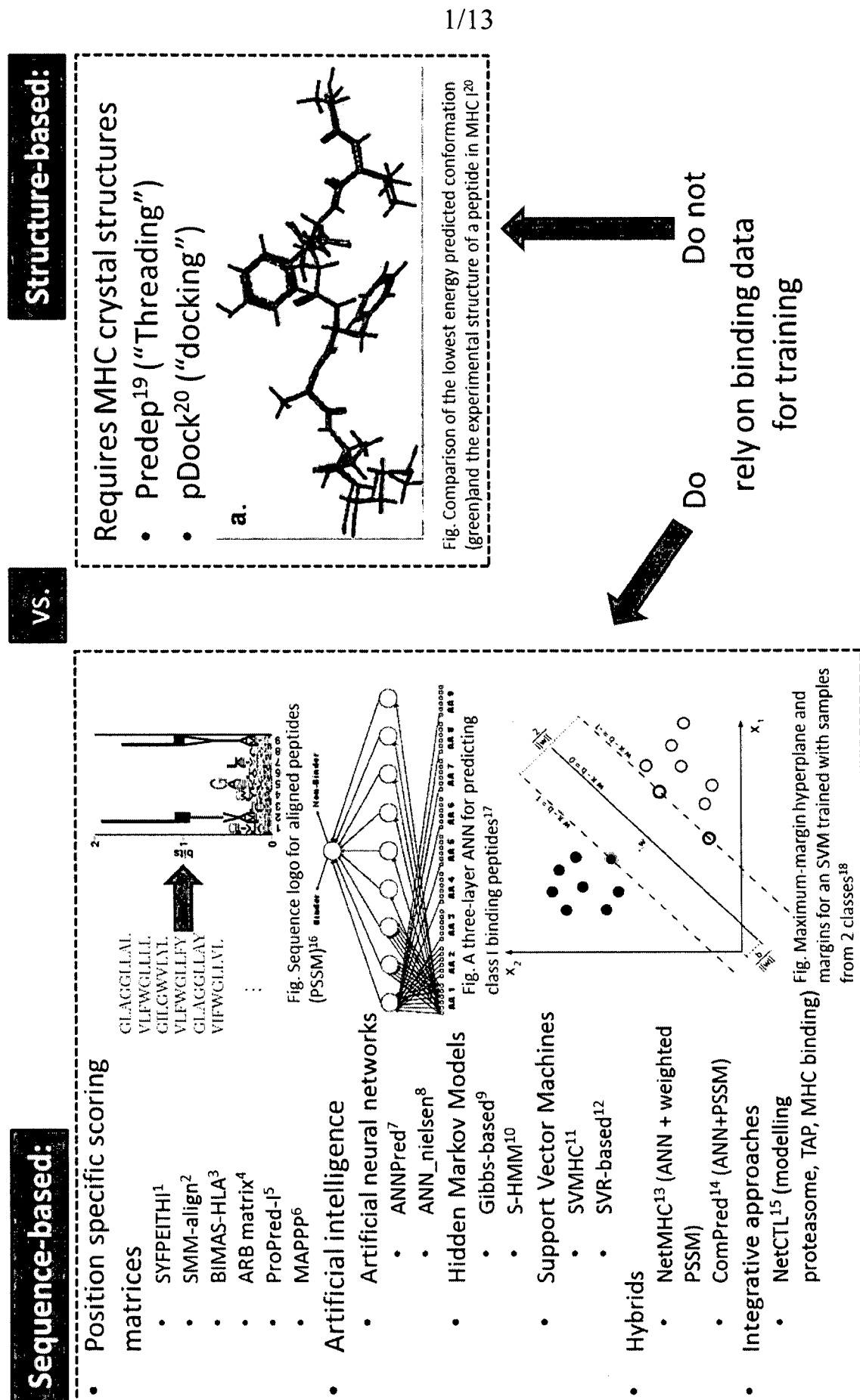


Fig. 1



¹Rammensee HJ (1999) Immunogenetics, ²Sette A (2005) Bioinformatics, ³Parker KC (1994) J Immunol, ⁴Sette A (2005) Immunogenetics, ⁵Sing H (2003) Bioinformatics, ⁶Hakenberg J (2003) Appl. Bioinformatics, ⁷Bhatia V (2004) Infect. Immun., ⁸Nielsen M (2003) Protein Sci, ⁹Nielsen M. (2004) Bioinformatics, ¹⁰Brusic V (2002) J Biosci Bioeng., ¹¹Dönnes P (2006) NAR, ¹²Flower et al. (2006) BMC Bioinform., ¹³Lundegaard C (2008) Bioinformatics, ¹⁴Brusic V (2004) Methods, ¹⁵Larsen MV (2005) Eur J Immunol., ¹⁶Lund, Nielsen: Immunological Bioinformatics, 2005. MIT Press, Page 117, ¹⁷Brusic V (1994) Complex Systems, ¹⁸http://en.wikipedia.org/wiki/Support_vector_machine, ¹⁹Altuvia Y (2004) Methods, ²⁰Khan JM (2010), Imm Research

Fig. 2

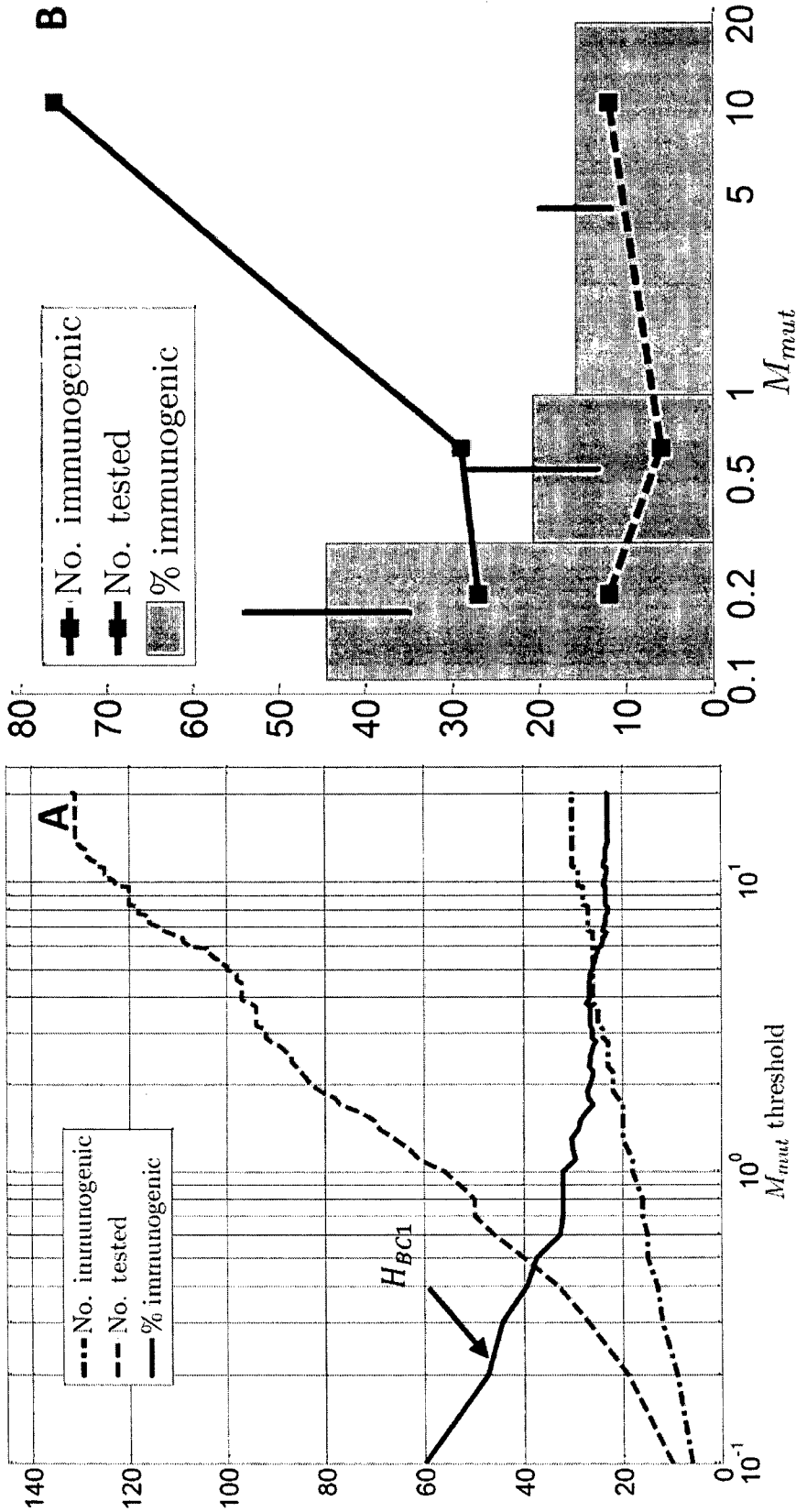
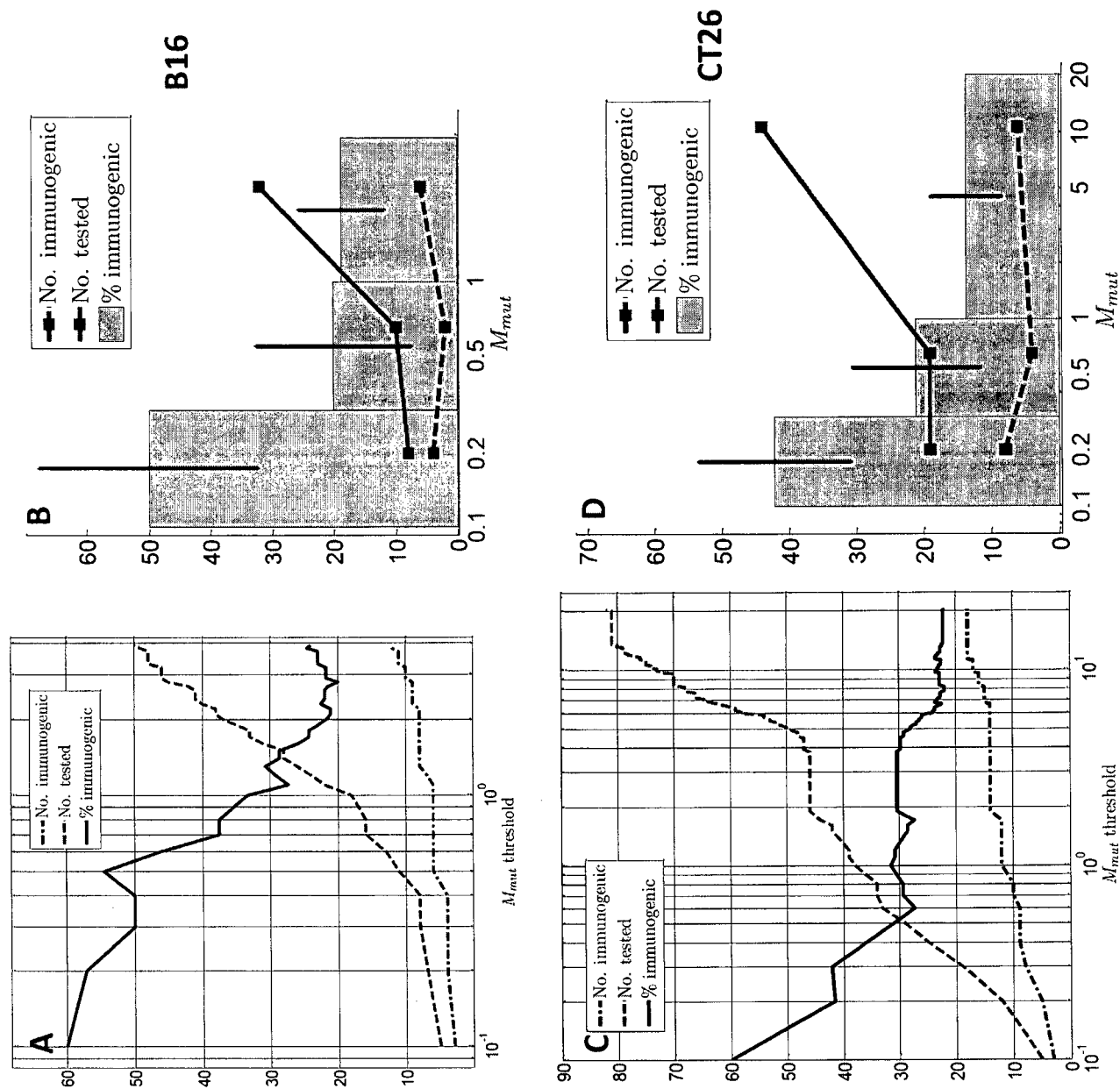
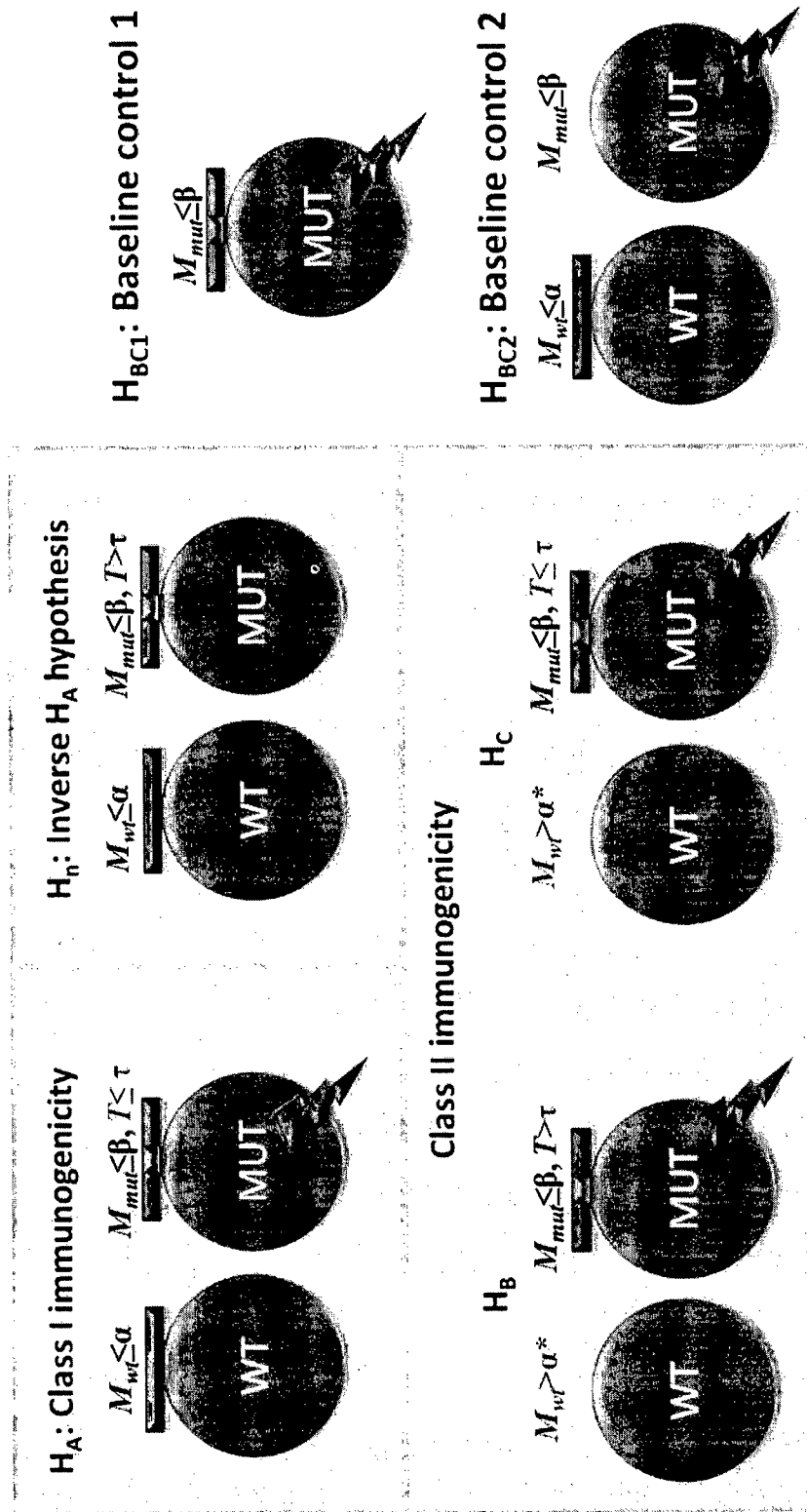


Fig. 3





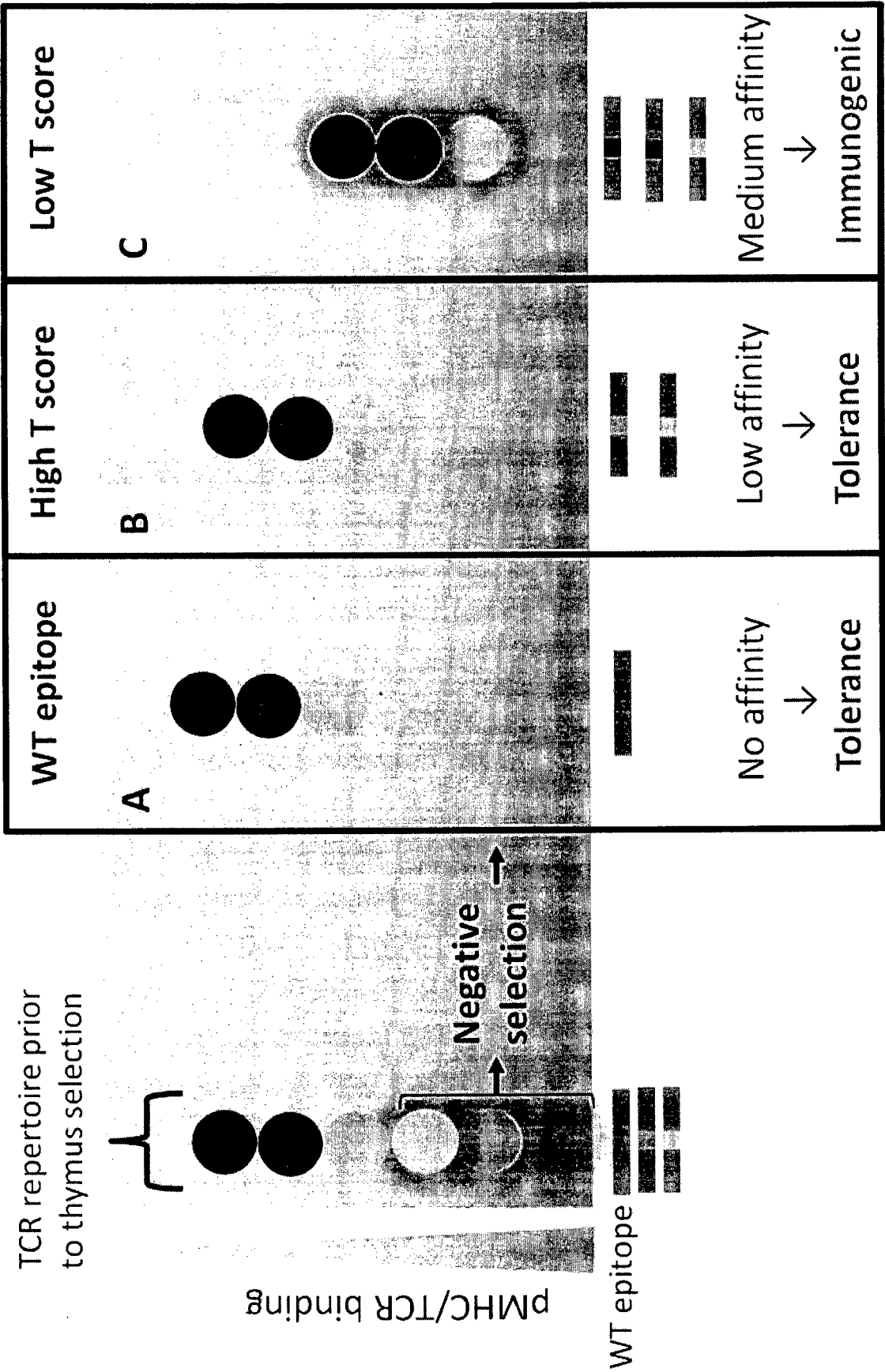


Fig. 5

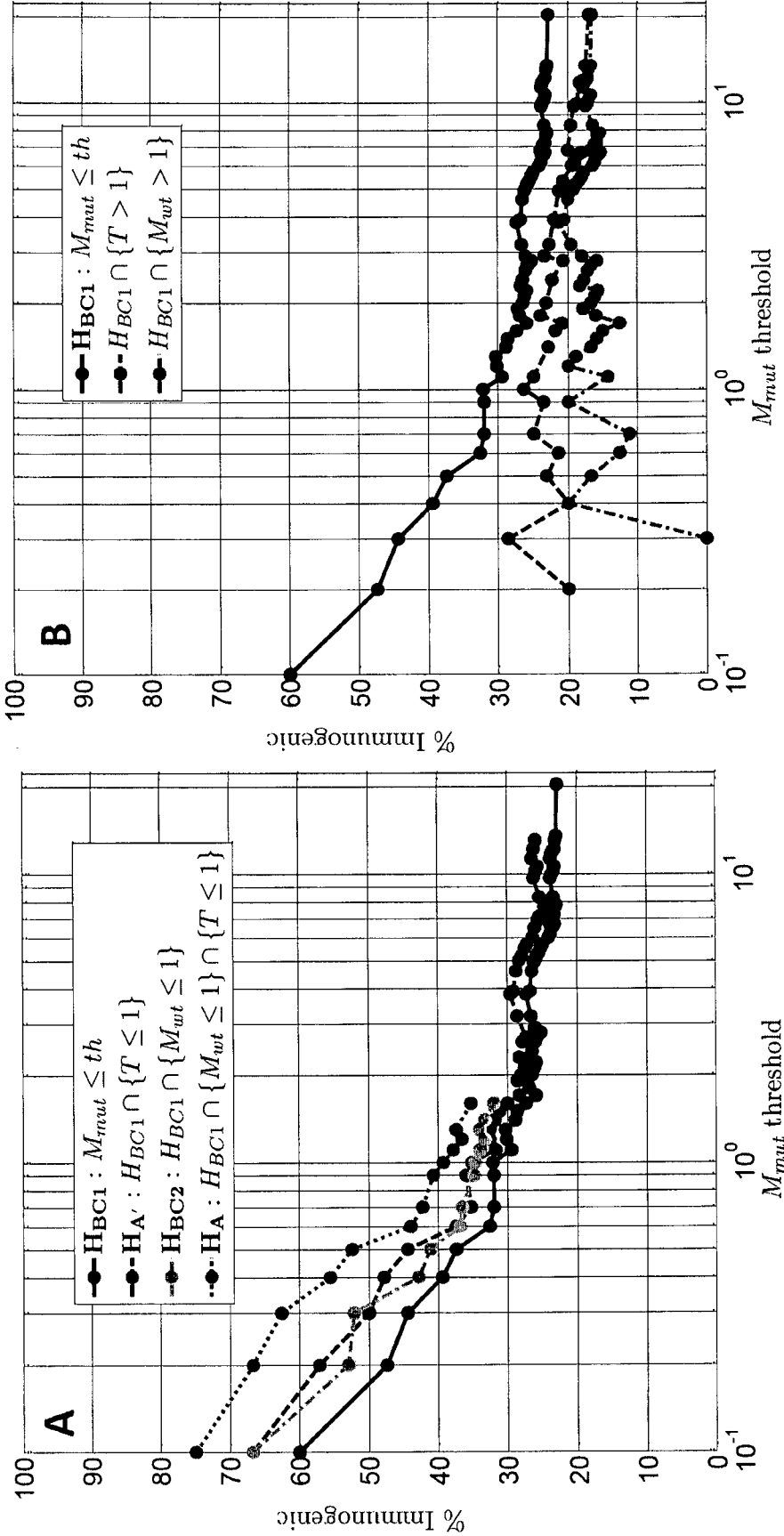


Fig. 6

Fig. 7

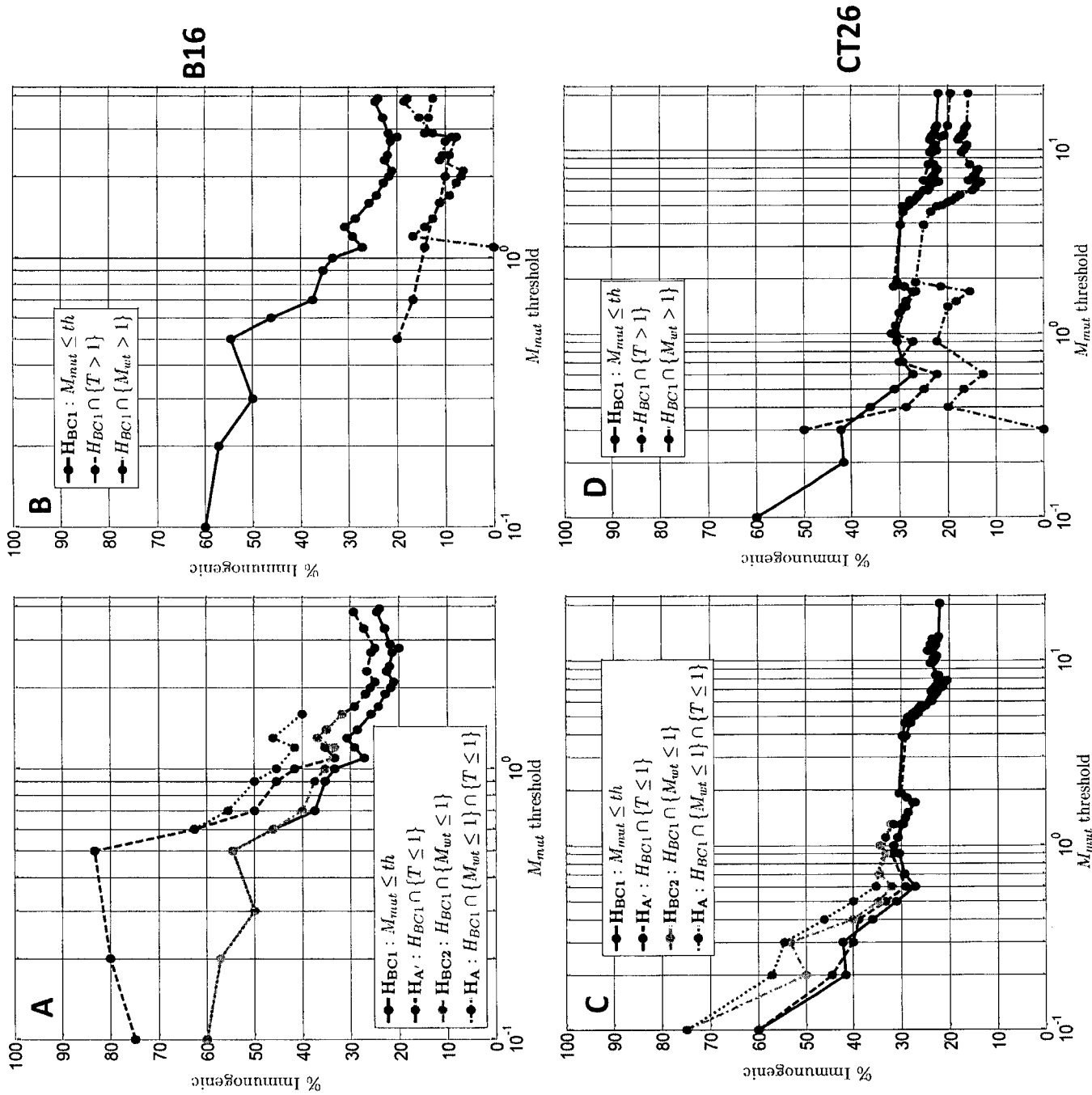
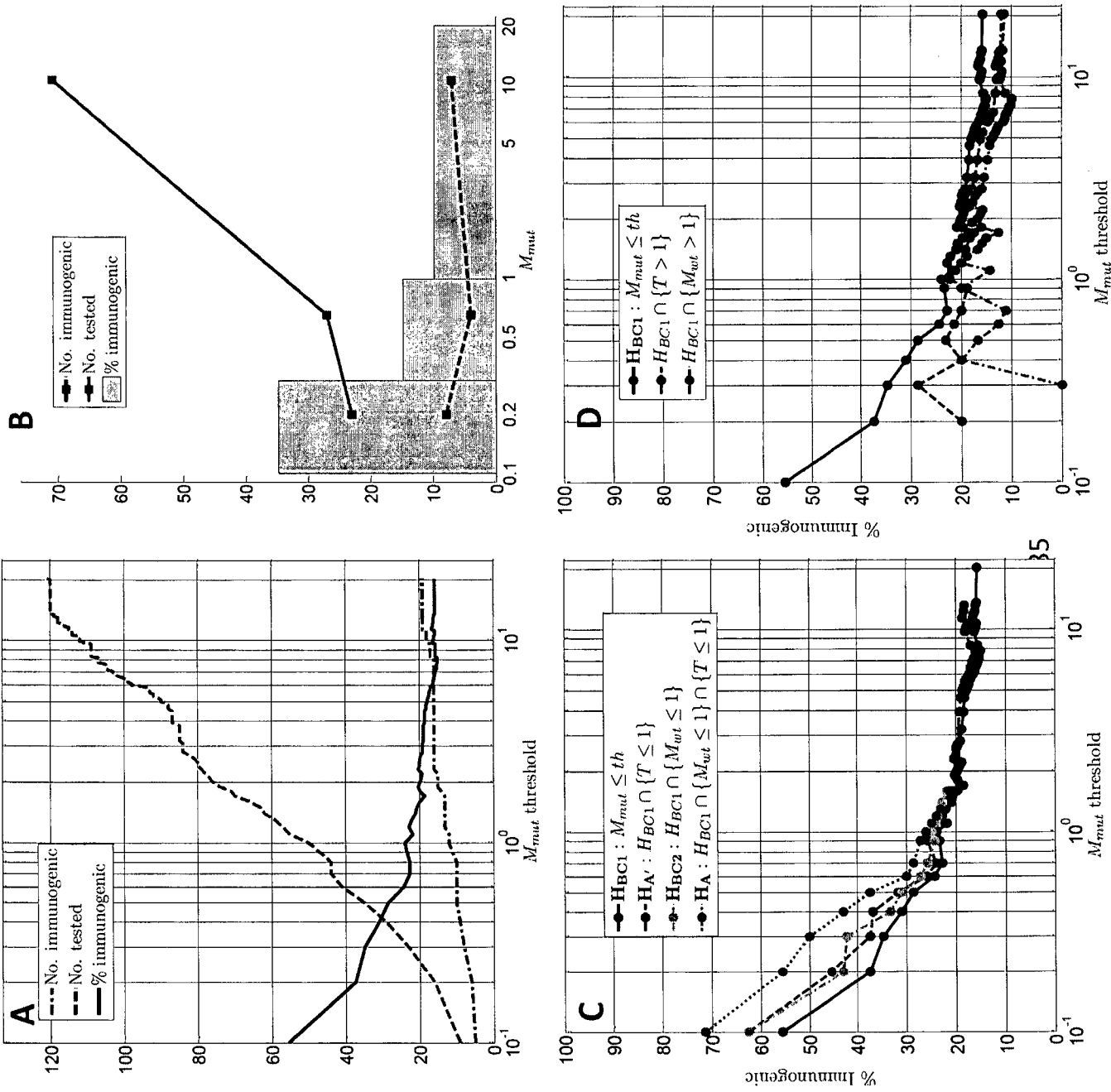


Fig. 8



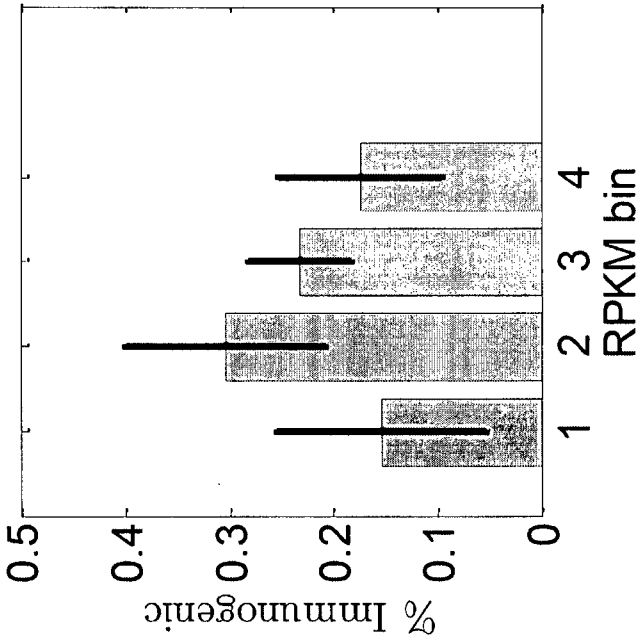
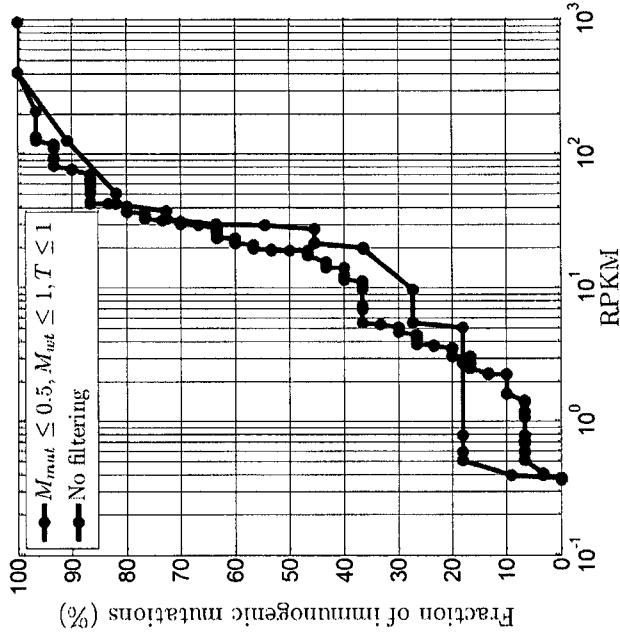
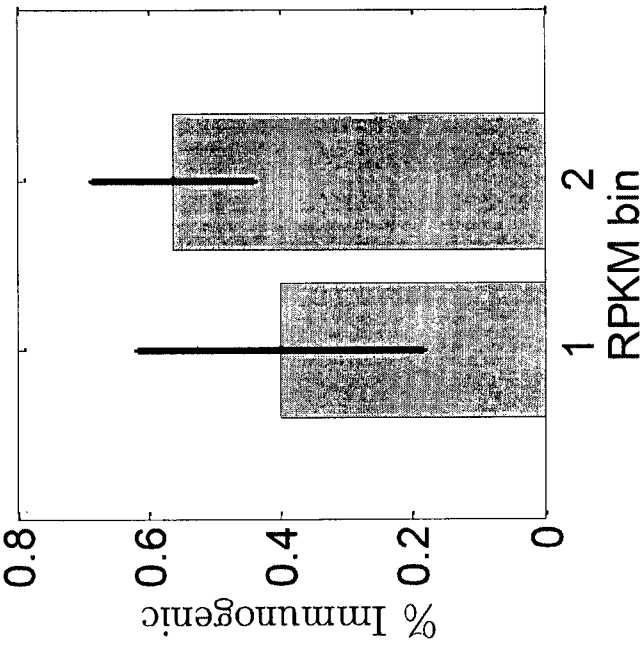


Fig. 9

Fig. 10

Sample ¹	Class	Gene	HLA allele	Anchor positions ²	Epitope (WT) ³	Epitope (MUT) ³	M _{mut}	M _{wt}	Achnor position mutation	Immunogenic
MZ7-MEL	class II (H ₈ UH _C)	SNRP116	HLA-A*03	1 2 <u>3</u> 4 5 <u>6</u> <u>7</u> 8 9	KI L DAV V AE	KI L DAV V AQ K	0.15	10.20	yes	yes
MZ7-MEL	class II (H ₈ UH _C)	ZNF335	HLA-B*38:01	1 2 <u>3</u> 4 5 6 7 8 9	Q H SAA P GP P	Q H SAA P G P L	0.20	18.35	yes	unknown
Zorn <i>et al.</i>	class II (H ₈ UH _C)	MYO1B	HLA-A*03	1 2 <u>3</u> 4 5 <u>6</u> <u>7</u> 8 9	E I KN P K V K	K I KN P K V K	0.25	2.25	no	yes
Graf <i>et al.</i>	class II (H ₈ UH _C)	FLT3	HLA-A*01	1 2 <u>3</u> 4 5 6 <u>7</u> 8 9	YVDFREY E YD	YVDFREY E Y Y	0.20	10.95	yes	yes
Robbins <i>et al.</i>	class II (H ₈ UH _C)	CTNNB1	HLA-A24	1 2 <u>3</u> 4 5 <u>6</u> <u>7</u> 8 9	S YLD S GIH S	S YLD S GIH F	0.38	10.58	yes	yes

¹ See Table 3

² Anchors (bold) and auxiliary anchors (underline) positions are indicated

³ Conserved anchor (bold) and auxiliary anchor (underline) residues for the given HLA type and epitope are printed in large fonts. Mutated residue is highlighted in red.

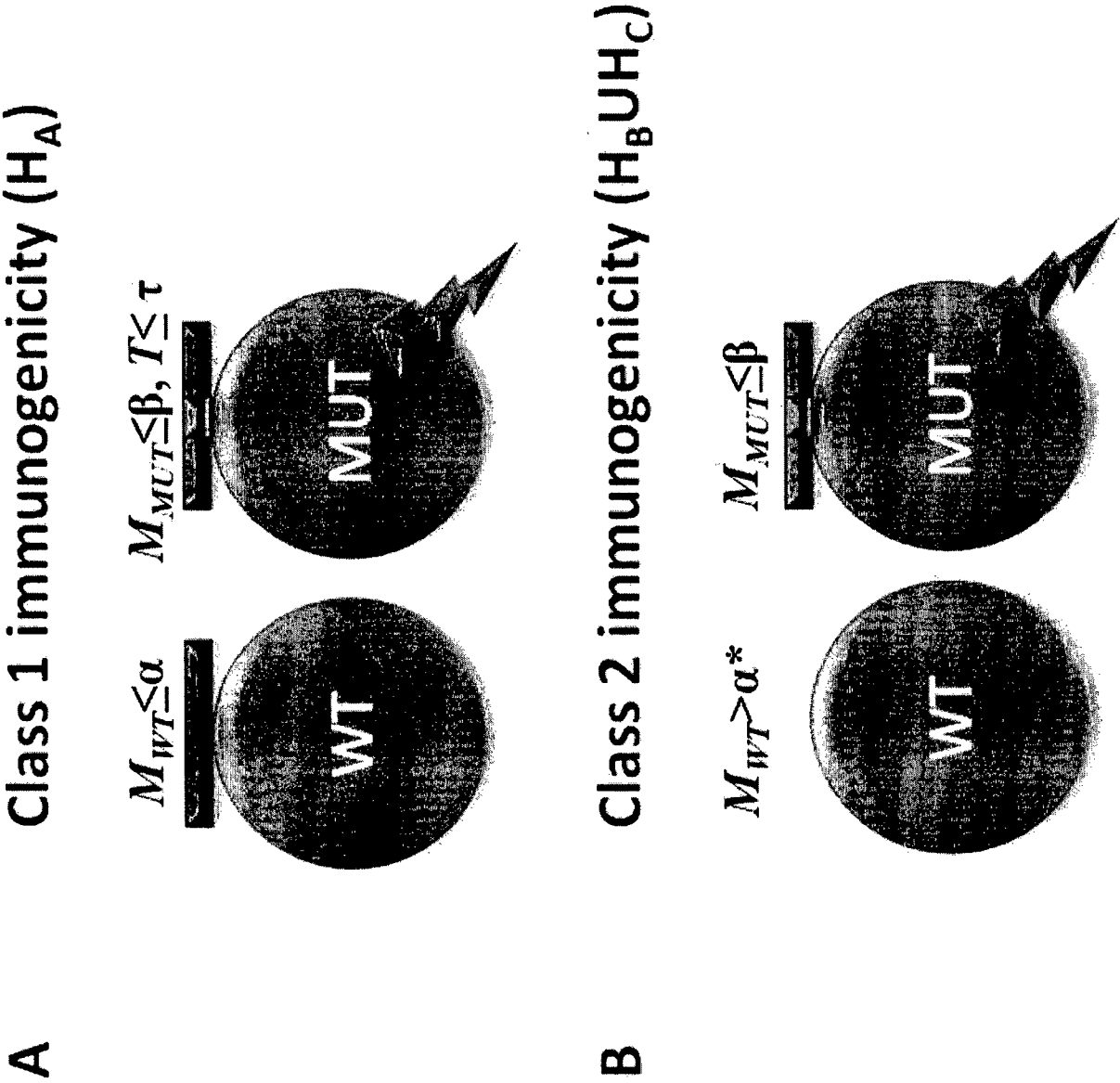
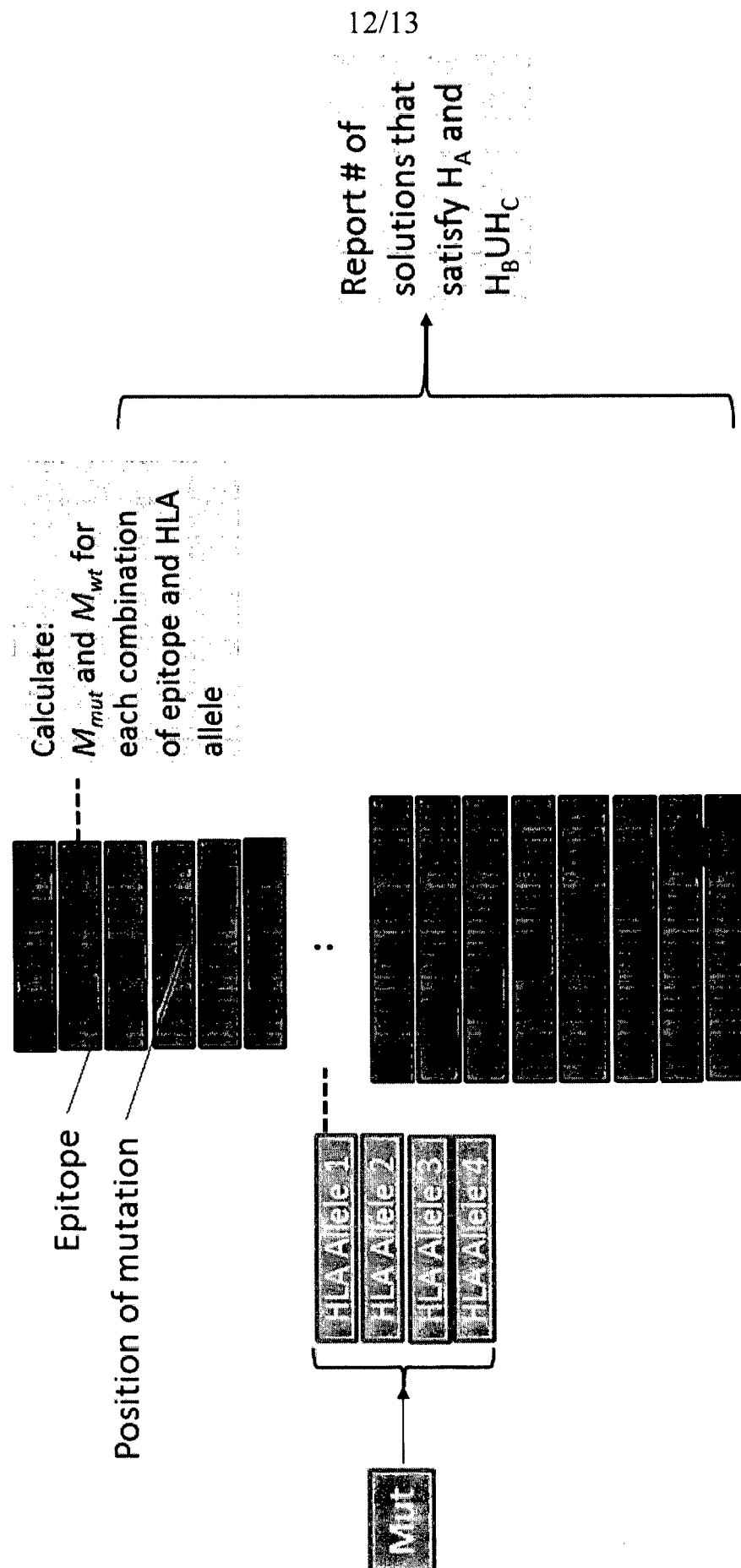


Fig. 11

Fig. 12



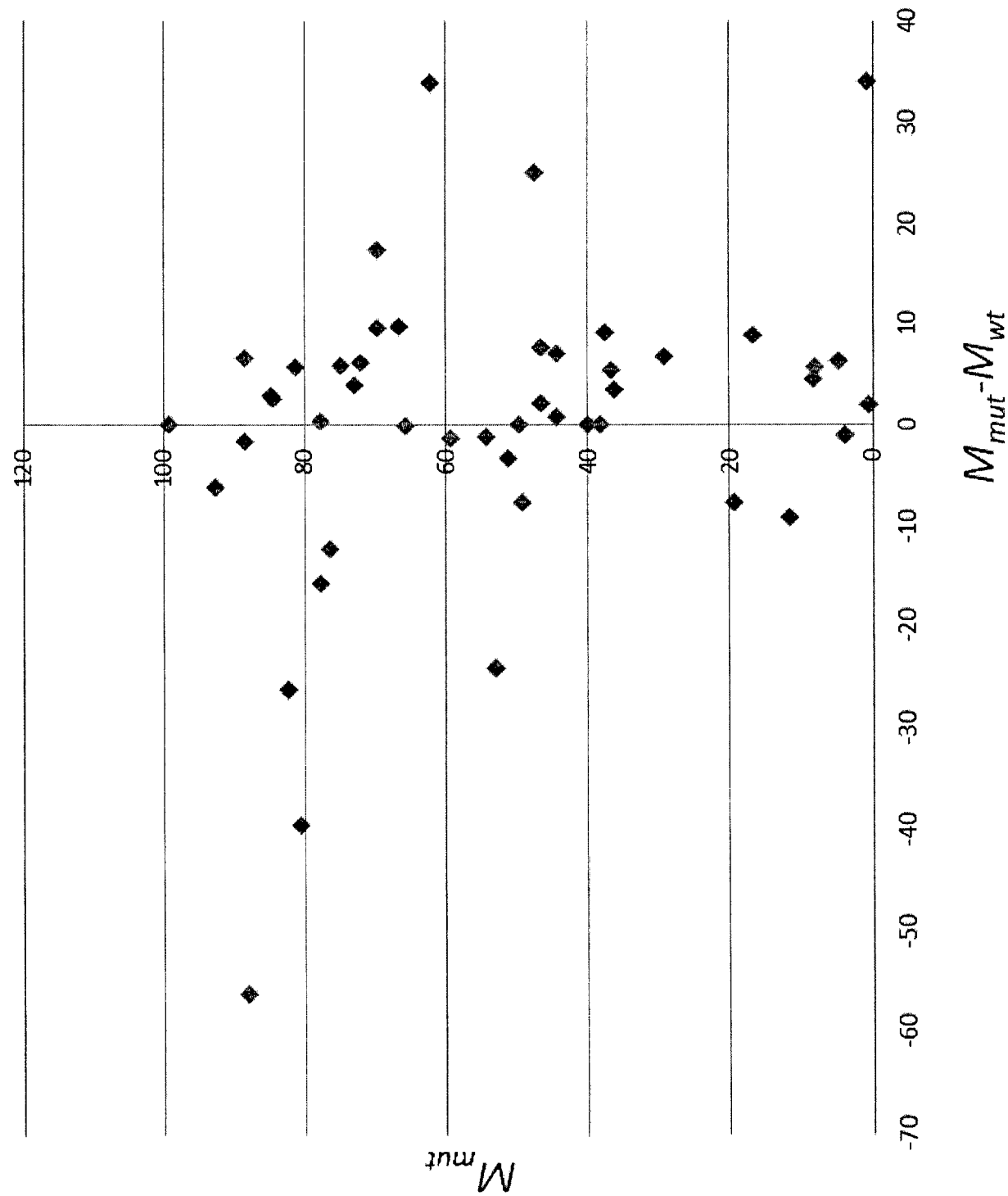


Fig. 13