

Supplementary Materials

T Cells Expressing a TCR-Like Antibody Selected Against the Heteroclitic Variant of a Shared MAGE-A Epitope Do Not Recognise the Cognate Epitope

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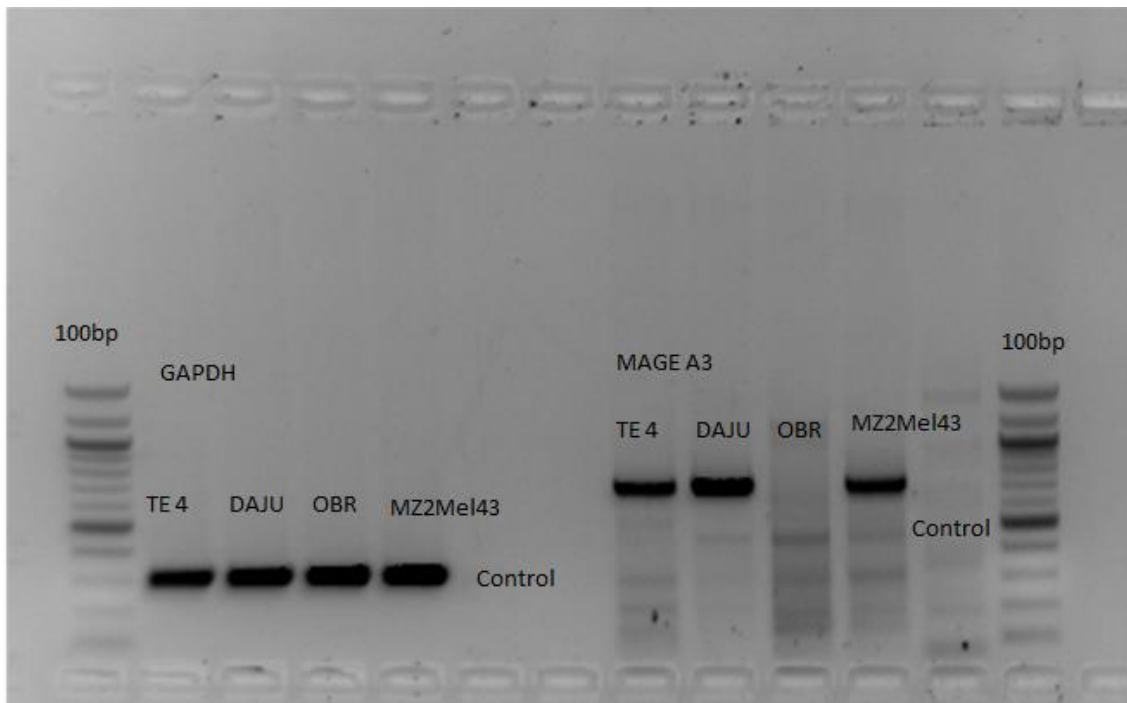


Figure S1. Complete PCR Gel showing the expression of MAGE A3 on tumor cell lines. GAPDH taken along as a control.

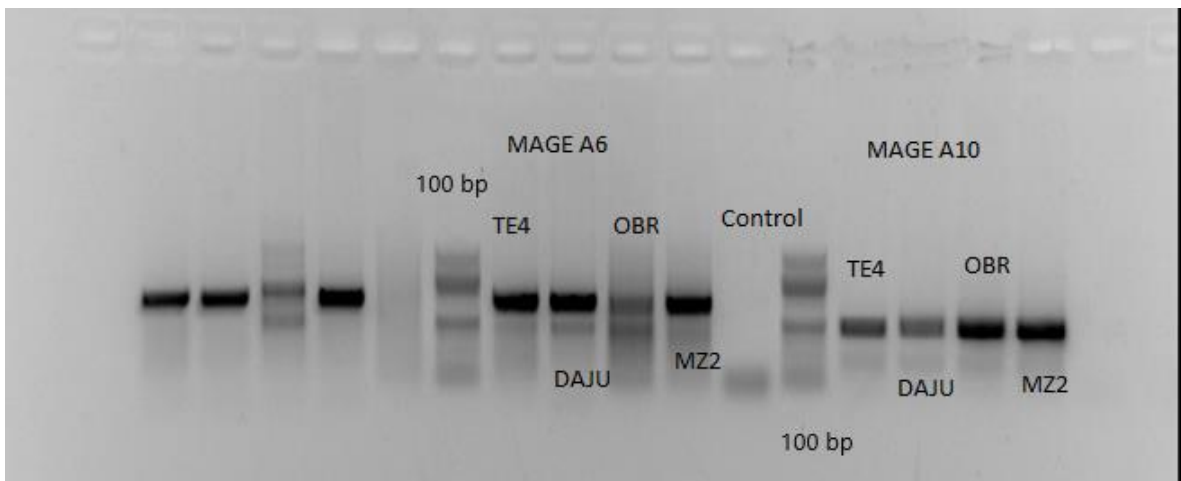


Figure S2. Complete PCR Gel showing the expression of MAGE A6 and MAGE A10 on tumor cell lines.

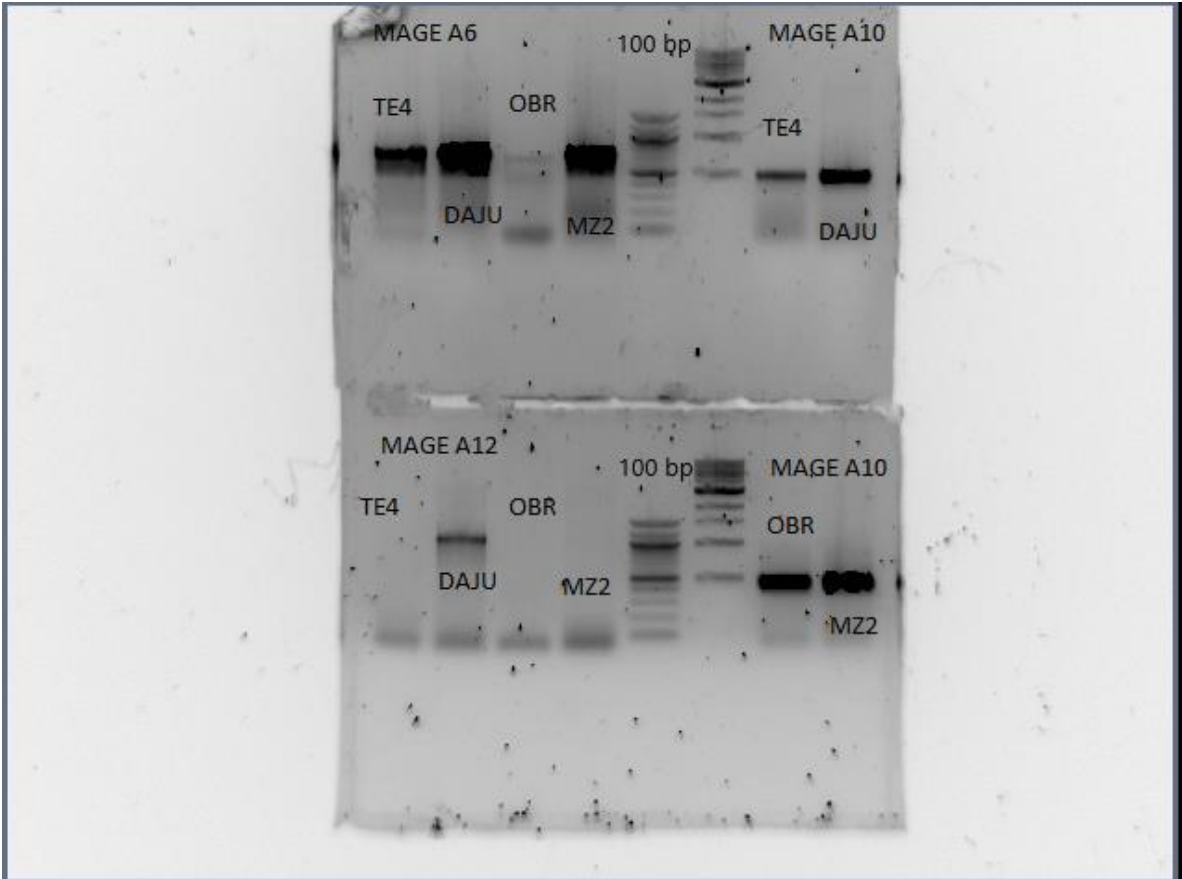


Figure S3. Complete PCR Gel showing the expression of MAGE A6, MAGE A10 and MAGE A12 on tumor cell lines.

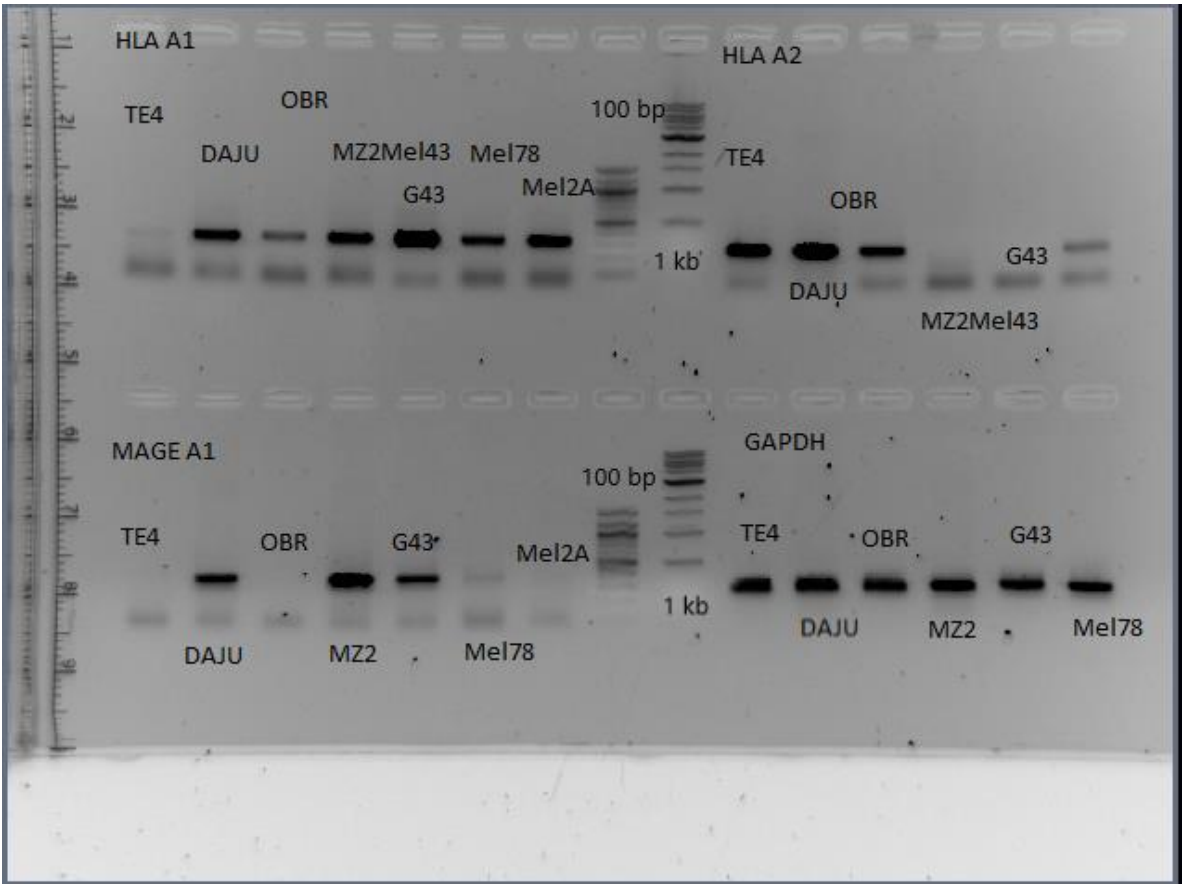


Figure S4. Complete PCR Gel showing the expression of MAGE A1, HLA A1, HLA A2 and GAPDH on tumor cell lines.

Table S1. Sizes and compositions of the phage-Fab libraries.

Antibody source ^a	Library	Insert (%) ^b	Size (cfu) ^c
VH or VL libraries PBL	VH	60	5.6x10 ⁸
	V _K	95	2.0x10 ⁸
	V _λ	90	2.9x10 ⁸
Spleen	VH	99	1.2x10 ⁷
	V _K	100	4.0x10 ⁷
	V _λ	90	5.2x10 ⁷
Fab libraries PBL Spleen	VH ^{PBL} VL ^{PBL}	80	1.4x10 ⁹
	VH ^{Spleen} VL ^{Spleen}	75	4.2x10 ⁹
combi Fab libraries PBL/ Spleen Spleen/ PBL	VH ^{PBL} VL ^{Spleen}	78	2.3x10 ⁹
	VH ^{Spleen} VL ^{PBL}	95	6.5x10 ⁸
Total size ^d		82	8.6x10 ⁹

^aSee the MM section for a description of the different (combinatorial) libraries. ^bPercentages of inserts determined by PCR using a minimum of 20 clones per library. ^cSizes of libraries given in clone forming units (cfu) and not corrected for clones without a Fab insert. ^dSum of cfu's of both Fab libraries and combinatorial libraries.

Table S2. Validation of phage-Fab library following selections with a set of control proteins.

Antigen	Selection round	Binders (ELISA)	Unique clones (restriction patterns)
NEF ^a	2	71/94	nt
LMP1 ^b	3	72/94	6/72
PSMA ^c (EKM)	3	39/93	6/39

^a NEF₅₆₋₂₀₅ (CAA13474.1): negative regulatory factor; nt is not tested. ^b LMP1₃₇₄₋₃₈₆ (QAR15098.1): latent membrane protein 1. ^c PSMA (EKM)₃₀₇₋₇₅₀ (AAA60209.1): prostate specific membrane antigen.

Table S3. Sequences of control proteins used for validation of phage-Fab library.

NEF₅₆₋₂₀₅ (NCBI Genbank acc. number: CAA13474.1)	AWLEAQEEEGDVGFVPRQVPLRPMTYKGAFDLGFFLKEK GGLDGLVYSKKRQEILDLWVYHTQGFFPDWQCYPGPGVVR YPLTFGWICYKLVPLDPTEVEEANKGENNSLLHPICQHGMDD EDGEVLVWRFDSSLARRHVARELHPEFYK
LMP1₃₇₄₋₃₈₆ (NCBI Genbank acc. number: QAR15098.1)	DDPHGPVQLSYYD
PSMA₃₀₇₋₇₅₀ (NCBI Genbank acc. number: AAA60209.1)	EKMGG SAPPDSSWRGSLKVPYNVGPFGFTGNFSTQKVKMHI HSTNEVTRIYNVIGTLRGAVEPDRYVILGGHRDSWVFGGIDP QSGAAVVHEIVRSFGTLKKEGWRPRRILFASWDAEEFGLLG STEWAEENSRLQERGVAYINADSSIEGNYTLRVDCTPLMYSL VHNLTKELKSPDEGFEGKSLYESWTKKSPSPEFSGMPRISKLGS GNDFEVFFQRLGIASGRARYTKNWETNKFSGYPLYHSVYETYE LVEKFYDPMFKYHLTVAQVRGGMVFELANSIVLPFDCRDYAV VLRKYADKIYSISMKHPQEMKTYSVSFDSLFAVKNFTEIASKF SERLQDFDKSNPIVLRMMNDQLMFLERAFIDPLGLPDRPFYR HVIYAPSSH NKYAGESFPGIYDALFDIESKVDPSKAWGEVKRQ IYVAAFTVQAAAETLSEVA

NEF: negative regulatory factor; LMP1: latent membrane protein 1; PSMA (EKM): prostate specific membrane antigen.