A long peptide from MELOE-1 contains multiple HLA class II T cell epitopes in addition to the HLA-A*0201 epitope: an attractive candidate for melanoma vaccination

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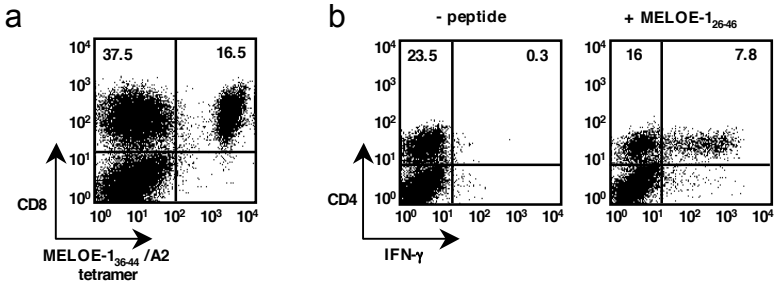
Online Resource 1



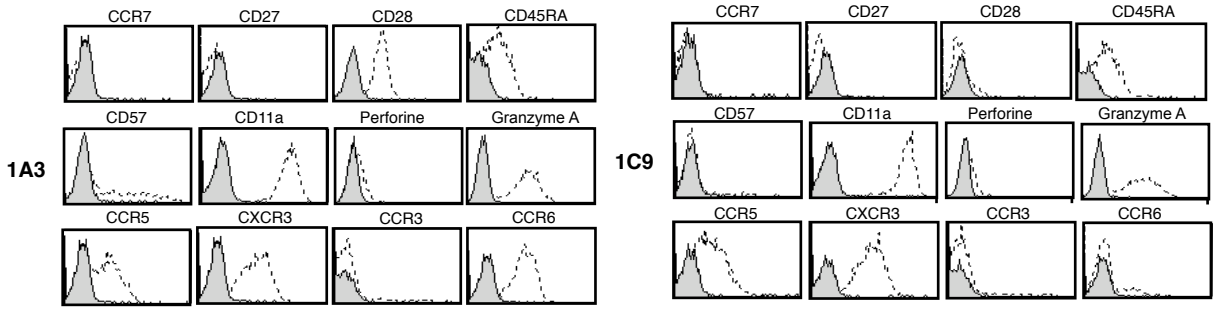
Representative examples of $CD8^+$ and $CD4^+$ T cell expansions after stimulation of PBMC from a healthy HLA-A*0201 donor with MELOE-1_{36-44} (a) and MELOE-1_{26-46} (b).
$CD8^+$ specific T lymphocytes were detected by staining with a MELOE-1_{36-44} /A2 tetramer and $CD4^+$ specific T cells were detected by their IFN-γ production following restimulation with peptide.

Online Resource 2. Cytokine production by $CD4^+$ T cell clones 1A3 and 1C9[a]

	Clone	TNF-α	IFN-γ	IL-2	GM-CSF	IL-4	IL-5	IL-13	IL-10	TGF-β	IL-17A	IL-17F
1A3	unstimulated	0.2[b]	0	0	0	0.1	0	0.2	0	0	0.3	0.3
	stimulated	85.7	94.9	25.2	68.3	17.3	0.4	38.4	0	0	0.4	0.6
1C9	unstimulated	0	0.1	0	0.2	0.4	0.4	0.7	0	0	0.3	0.4
	stimulated	88.2	81.7	20.4	42.6	17.1	0.1	38.6	0	0	0.3	0.4

[a] $CD4^+$ T cell clones 1A3 and 1C9 were stimulated for 5 hours with immobilized anti-CD3 mAb (or PMA / ionomycin for IL-17 production) and their cytokine production was assessed by intracellular staining and flow cytometry.
[b] percentage of positive cells

Online Resource 3



Expression of classical markers differentiating naive vs memory T cells (CCR7, CD27, CD28, CD45RA, CD57, CD11a, perforine, Granzyme A) and Th1 vs Th2 $CD4^+$ T cells (CCR5, CXCR3, CCR3, CCR6) were analyzed by flow cytometry.