

Article: **A Peptide Epitope Derived from the Cancer Testis Antigen HOM-MEL-40/SSX2 Capable of Inducing CD4⁺ and CD8⁺ T-Cell as well as B-cell Responses**

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Table SM-1: T-cell lines and clones applied in this study

Patient	Cells used for <i>in vitro</i> stimulation	Peptide used for <i>in vitro</i> stimulation	Clones/Lines generated	responsive to	HLA context	
* #46	sorted CD8 ⁺ T cells	IMP / p58-66	2 CD8 ⁺ T-cell clones	p58-66	A*0201	
** #24	sorted CD8 ⁺ T cells	SSX2 / p103-111	5 CD8 ⁺ T-cell clones	p103-111	A*0201	
				p101-111		
BC399	PBMC	SSX2 / p98-112	1 CD4 ⁺ T-cell line (oligoclonal)	p98-112	DRB1*0101	
				p101-115	DRB1*0101 DRB1*0701	
	PBMC	SSX2 / p101-115	1 CD4 ⁺ T-cell line (oligoclonal)	p98-112	DRB1*0101	
				p101-115	DRB1*0101 DRB1*0701	
BC418	PBMC	SSX2 / p98-112	8 CD4 ⁺ T-cell clones	p98-112	DRB1*0101	
				p101-115		
				p101-111		
COL13	PBMC	SSX2 / p101-111	1 CD8 ⁺ T-cell line (oligoclonal)	p101-111	A*0201	
BC699	sorted CD8 ⁺ T cells	SSX2 / p101-111	5 CD8 ⁺ T-cell clones	p101-111	A*0201	
				p103-111		
	PBMC	SSX2 / p101-111	3 CD8 ⁺ T-cell clones	p101-111	A*0201	
				p103-111		
				2 CD4 ⁺ T-cell clones	p98-112	DRB1*0101
					p101-111	
	p101-115					

* derived from a former study focused on IMP-derived MHC-I epitopes

** derived from a former study focused on SSX2-derived MHC-I epitopes

Table SM-2: Subtype-specific dissection of the restriction of the T-cell response of BC399 lines #98 and #101 by recognition of allogeneic APCs with partial HLA-DR identity.

Allogeneic APCs Pulsed with p98-112				T-cell response by the lines #98 and #101		
				HLA-DRB1*	0101	0701
				HLA-DRB4*	-	0101
SK-MEL-37	HLA-DRB1*	0101	0301	Yes		
	HLA-DRB3*	0202	-			
LCL BC418	HLA-DRB1*	0101	0301	Yes		
	HLA-DRB3*	0201	-			
LCL Co149	HLA-DRB1*	0101	1501	Yes		
	HLA-DRB5*	-	0101			
LCL Co17	HLA-DRB1*	0701	1101	No		
	HLA-DRB3*	-	0202			
	HLA-DRB4*	0103N	-			
LCL BC355	HLA-DRB1*	0701	1302	No		
	HLA-DRB3*	-	0301			
	HLA-DRB4*	0101	-			

The table summarizes the results of IFN- γ ELISPOT assays. HLA-DR subtypes shared by allogeneic APCs and effector cells are printed bold. “Yes” indicates a significant specific IFN- γ release restricted to the common subtype. “No” indicates that no significant response was observed in the context of the corresponding HLA-DR constellation.

Table SM-3: Subtype-specific dissection of the restriction of the T-cell response of BC399 lines #98 and #101 by recognition of allogeneic APCs with partial HLA-DR identity.

Allogeneic APCs Pulsed with p101-115				T-cell response by the lines #98 and #101		
				HLA-DRB1*	0101	0701
				HLA-DRB4*	-	0101
SK-MEL-37	HLA-DRB1*	0101	0301	Yes		
	HLA-DRB3*	0202	-			
LCL BC418	HLA-DRB1*	0101	0301	Yes		
	HLA-DRB3*	0201	-			
LCL Co149	HLA-DRB1*	0101	1501	Yes		
	HLA-DRB5*	-	0101			
LCL Co17	HLA-DRB1*	0701	1101	Yes		
	HLA-DRB3*	-	0202			
	HLA-DRB4*	0103N	-			
LCL Co89	HLA-DRB1*	0701	1201	Yes		
	HLA-DRB3*	-	0202			
	HLA-DRB4*	0103	-			

The table summarizes the results of IFN- γ ELISPOT assays. HLA-DR subtypes shared by allogeneic APCs and effector cells are printed bold. “Yes” indicates a significant specific IFN- γ release restricted to the common subtype. “No” indicates that no significant response was observed in the context of the corresponding HLA-DR constellation.

Table SM-4: Subtype-specific dissection of the restriction of the T-cell response of BC418 T-cell clone #10 (primed with p98-112) by recognition of allogeneic APCs with partial HLA-DR identity.

Allogeneic APCs pulsed with p98-112, p101-111, or p101-115				T-cell response by clone #10	
				HLA-DRB1*	HLA-DRB3*
				0101	0301
				HLA-DRB3*	0202
				0202	-
LCL BC399	HLA-DRB1*	0101	0701	Yes	
	HLA-DRB4*	-	0101		
LCL Co89	HLA-DRB1*	0701	1201	No	
	HLA-DRB3*	-	0202		
	HLA-DRB4*	0103	-		
LCL AlaBM	HLA-DRB1*	0101	1501	Yes	
	HLA-DRB5*	-	0101		
LCL C0125	HLA-DRB1*	0301	1101	No	
	HLA-DRB3*	0101	0202		
LCL PC 1	HLA-DRB1*	0301	0803	No	
	HLA-DRB3*	0101	-		

The table summarizes the results of IFN- γ ELISPOT assays. HLA-DR subtypes shared by allogeneic APCs and effector cells are printed bold. “Yes” indicates a significant specific IFN- γ release restricted to the common subtype. “No” indicates that no significant response was observed in the context of the corresponding HLA-DR constellation.