HLDA10 VALIDATION FILEI FOR CD366 TIM-3

MOLECULE NAME TIM-3

ALTERNATIVE NAMES Hepatitis A virus cellular receptor 2, HAVCR-2, T-cell immunoglobulin and mucin

domain-containing protein 3, TIMD-3, T-cell immunoglobulin mucin receptor 3,

TIM-3, T-cell membrane protein 3

GENE FAMILY

PROTEIN Single pass type I membrane protein

FUNCTION Regulates macrophage activation. Inhibits T-helper type 1 lymphocyte (Th1)-

mediated auto- and alloimmune responses and promotes immunological tolerance.

May be also involved in T-cell homing. Receptor for LGALS9

EXPRESSION T-helper type 1 lymphocyte (Th1)-specific

On 90% monocytes, NK cells

Mainly mouse studies

10-24

Antibody Name Clone 344823, FAB2365P

Specificity Binds monocytes

Antibody Species Rat Ig Isotype IgG2a

Immunogen

Epitope Recognised

Submitter R&D

References

10-75

Antibody Name F38-2E2

Specificity

Antibody Species Mouse Ig Isotype IgG1. K

Immunogen Human Tim-3 fusion protein

Epitope Recognised

Submitter BioLegend

References

INFORMATION FOR CONFIRMATION OF SPECIFICITY

	10-24	10-75
Expression on transfected CHO	Yes	Not confirmed
Expression on cell line	Weak pos on Raji and Daudi	

Expression on	Yes pos on monocytes and brighter on CD1c	Yes pos on monocytes and brighter on CD1c	
normal primary cell	DC that CD16 population	DC that CD16 population	
	Bright on pDC in one study.		
Thymic DC	Pos	Pos	
AML	Pos on AML blasts – 3 samples	Pos on AML blasts – 3 samples	
In vitro derived cells	Bifid peak pos on GC-csf derived macrophages, downregulated by LPS/IFN and IL-4, pos on m-csf macrophage which is increased by LPS/IFN, IL4 or IL10, pos on MoDC but slightly downreg by LPS	Bifid peak pos on GC-csf derived macrophages, downregulated by LPS/IFN and IL-4, pos on m-csf macrophage which is increased by LPS/IFN, IL4 or IL10, pos on MoDC but slightly downreg by LPS	

CELL LINE EXPRESSION

	Cell lines	10-24	10-75
Burkitt lymphonma B cell lines	Raji	-	-
	Daudi		
T cell leukemia	Jurkat		
Myeloid Leukemia	HEL	-	-
	HL-60	-	-
	NB4	+	+
	THP-1	+/-	+/-
	U-937	+/-	+/-
Hodgkins derived lines	KM-H2		

Figure 1. Binding of mAb to CHO-K1 transfected with TIM-3 cDNA $\,$

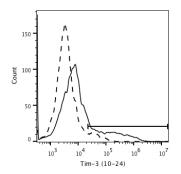


Figure 2. Binding of mAb to fresh blood DC

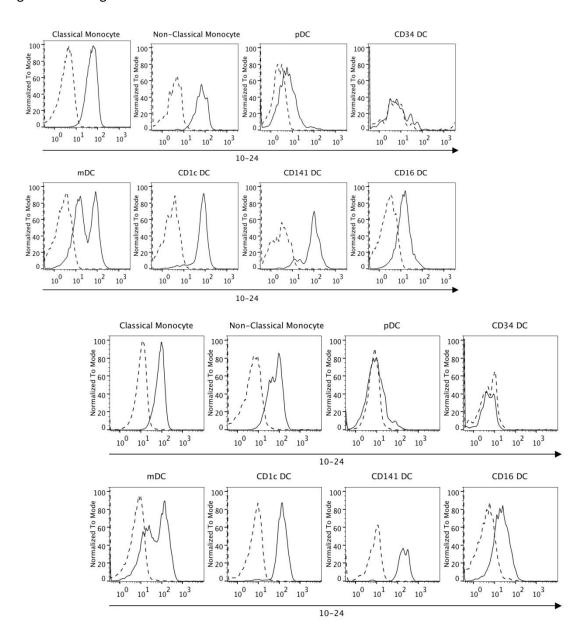
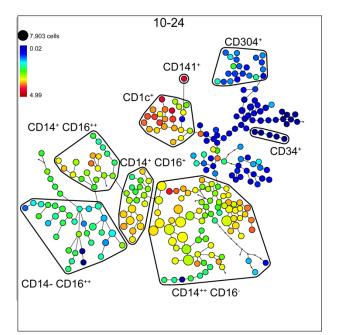
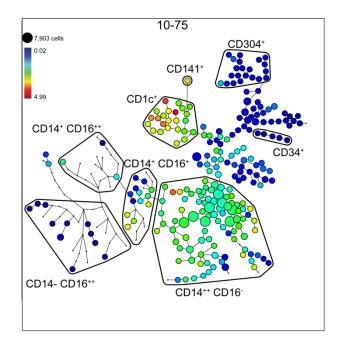


Figure 3. Clustering analysis using SPADE to demonstrate expression of TIM3 antibodies on fresh blood DC





PUBLICATIONS USING ANTIBODIES

(1)

1. Wei F, Zhong S, Ma Z, Kong H, Medvec A, Ahmed R, et al. Strength of PD-1 signaling differentially affects T-cell effector functions. Proceedings of the National Academy of Sciences of the United States of America. 2013;110(27):E2480-9. Epub 2013/04/24.