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Anti-TREM1 / CD354 Reference Antibody (PY159)

Recombinant Antibody
Catalog # APR10215

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q9NP99
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	26387

Additional Information

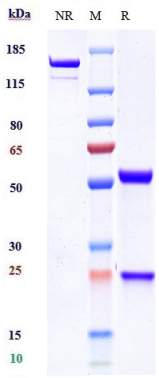
Target/Specificity	TREM1 / CD354
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

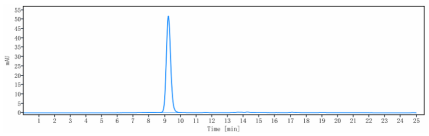
Name	TREM1
Function	[Isoform 1]: Cell surface receptor that plays important roles in innate and adaptive immunity by amplifying inflammatory responses (PubMed:10799849, PubMed:21393102). Upon activation by various ligands such as PGLYRP1, HMGB1 or HSP70, multimerizes and forms a complex with transmembrane adapter TYROBP/DAP12 (PubMed:17568691, PubMed:25595774, PubMed:29568119). In turn, initiates a SYK-mediated cascade of tyrosine phosphorylation, activating multiple downstream mediators such as BTK, MAPK1, MAPK3 or phospholipase C-gamma (PubMed:14656437, PubMed:21659545). This cascade promotes the neutrophil- and macrophage- mediated release of pro-inflammatory cytokines and/or chemokines, as well as their migration and thereby amplifies inflammatory responses that are triggered by bacterial and fungal infections (PubMed:17098818, PubMed:17568691). By also promoting the amplification of inflammatory signals that are initially triggered by Toll-like receptor (TLR) and NOD-like receptor engagement, plays a major role in the pathophysiology of acute and chronic inflammatory diseases of different etiologies including septic shock and atherosclerosis (PubMed:11323674, PubMed:21393102). [Isoform 1]: Cell membrane; Single-pass type I membrane protein.

Cellular Location	Note=Recruited to lipid rafts when activated.
Tissue Location	Mostly expressed by immune cells of the myeloid lineage, such as monocytes, macrophages, neutrophils and dendritic cells (PubMed:10799849). Expression is associated with a mature stage of myeloid development (PubMed:11922939). Highly expressed in adult liver, lung and spleen than in corresponding fetal tissue. Also expressed in the lymph node, placenta, spinal cord and heart tissues Isoform 2 was detected in the lung, liver and mature monocytes

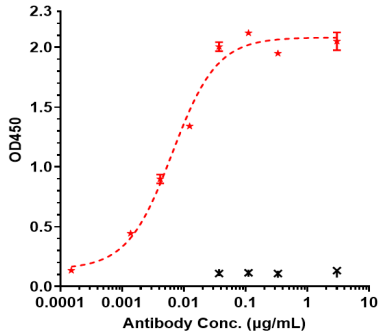
Images



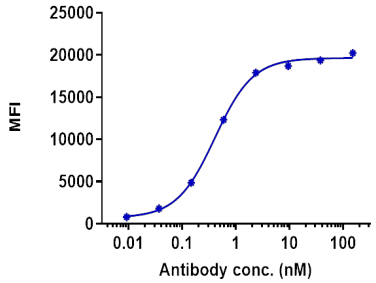
Anti-TREM1 / CD354 Reference Antibody (PY159) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-TREM1 / CD354 Reference Antibody (PY159) is more than 95%, determined by SEC-HPLC.

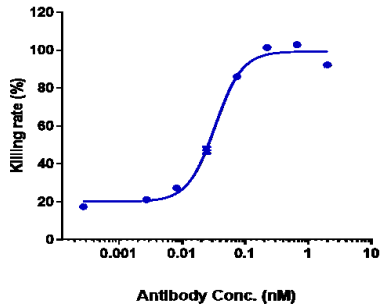


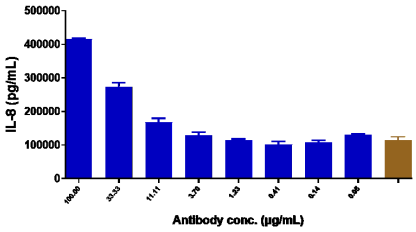
Immobilized human TREM1 His at 2 ug/mL can bind Anti-TREM1 / CD354 Reference Antibody (PY159), EC50=0.00645 ug/mL.



Human TREM1 HEK293 cells were stained with Anti-TREM1 / CD354 Reference Antibody (PY159) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC50=0.7744nM.

The endocytosis ratio PY159 by hu-TREM1-HEK293 increased with the increase of antibody concentration, and the Internalization Rate (%) reached 80% at antibody concentration of 0.3 nM.





Anti-TREM1 Reference Antibody (PY159) Activation was evaluated using PBMC. The max induction fold was approximately 3.16

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