

# Anti-TREM1 / CD354 Reference Antibody (PY159)

Recombinant Antibody

Catalog # APR10215

## Product Information

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<b>Application</b>	FC, Kinetics, Animal Model
<b>Primary Accession</b>	<a href="#">Q9NP99</a>
<b>Reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	26387

## Additional Information

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

## Protein Information

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<b>Name</b>	TREM1
<b>Function</b>	<p>[Isoform 1]: Cell surface receptor that plays important roles in innate and adaptive immunity by amplifying inflammatory responses (PubMed:<a href="#">10799849</a>, PubMed:<a href="#">21393102</a>). Upon activation by various ligands such as PGLYRP1, HMGB1 or HSP70, multimerizes and forms a complex with transmembrane adapter TYROBP/DAP12 (PubMed:<a href="#">17568691</a>, PubMed:<a href="#">25595774</a>, PubMed:<a href="#">29568119</a>). In turn, initiates a SYK-mediated cascade of tyrosine phosphorylation, activating multiple downstream mediators such as BTK, MAPK1, MAPK3 or phospholipase C-gamma (PubMed:<a href="#">14656437</a>, PubMed:<a href="#">21659545</a>). 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:<a href="#">17098818</a>, PubMed:<a href="#">17568691</a>). 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:<a href="#">11323674</a>, PubMed:<a href="#">21393102</a>).</p> <p>[Isoform 1]: Cell membrane; Single-pass type I membrane protein.</p>

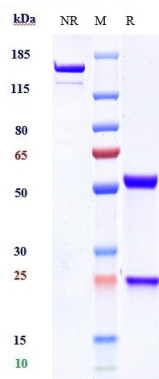
Cellular Location

Note=Recruited to lipid rafts when activated.

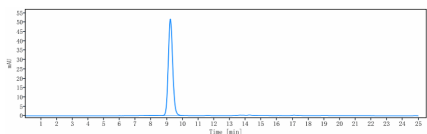
Tissue Location

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

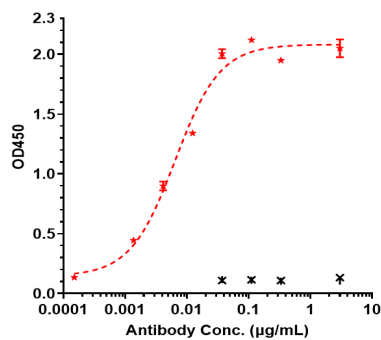
Images



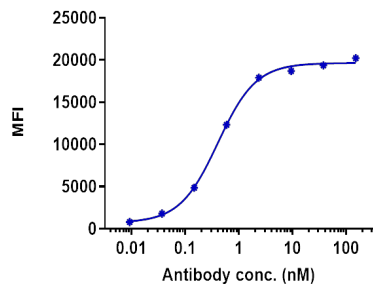
Anti-TREM1 / CD354 Reference Antibody (PY159) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



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

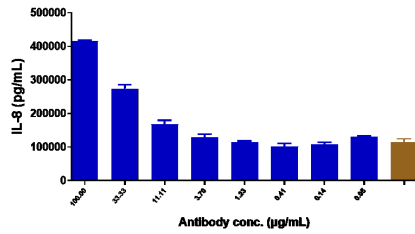
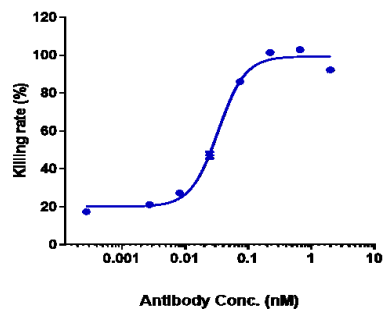


Immobilized human TREM1 His at 2 µg/mL can bind Anti-TREM1 / CD354 Reference Antibody (PY159),EC50=0.00645 µg/mL



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, EC275=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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