

**Anti-TREM1 / CD354 Reference Antibody (PY159)
Recombinant Antibody
Catalog # APR10215****Specification**

Anti-TREM1 / CD354 Reference Antibody (PY159) - Product Information

Application	FC, E, FTA
Primary Accession	O9NP99
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	143.66 KDa

Anti-TREM1 / CD354 Reference Antibody (PY159) - Additional Information**Target/Specificity**
TREM1 / CD354**Endotoxin**
< 0.001EU/ µg,determined by LAL method.**Conjugation**
Unconjugated**Expression system**
CHO Cell**Format**
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.**Storage**
-80°C for 2 years under sterile conditions □ -20°C for 1 year under sterile conditions □ Avoid repeated freeze-thaw cycles.**Anti-TREM1 / CD354 Reference Antibody (PY159) - 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](http://www.uniprot.org/citations/10799849), PubMed: [21393102](http://www.uniprot.org/citations/21393102)). Upon activation by various ligands such as PGLYRP1, HMGB1 or HSP70, multimerizes and forms a complex with transmembrane adapter TYROBP/DAP12 (PubMed: [17568691](http://www.uniprot.org/citations/17568691), PubMed: [25595774](http://www.uniprot.org/citations/25595774), PubMed: [29568119](http://www.uniprot.org/citations/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).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. 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

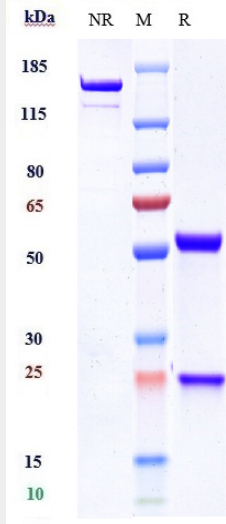
Anti-TREM1 / CD354 Reference Antibody (PY159) - Protocols

Provided below are standard protocols that you may find useful for product applications.

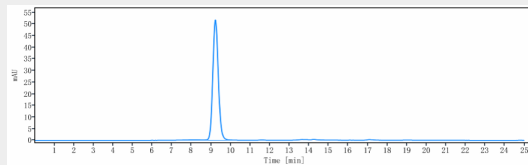
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TREM1 / CD354 Reference Antibody (PY159) - Images

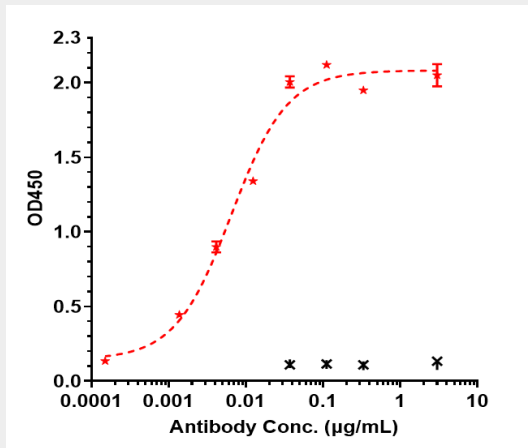




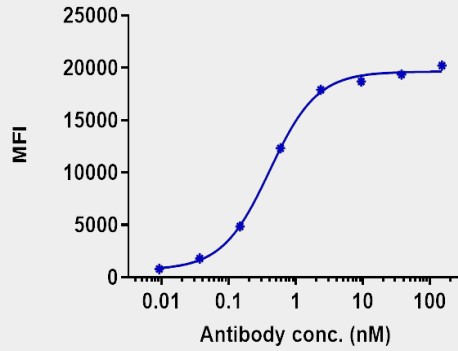
Anti-TREM1 / CD354 Reference Antibody (PY159) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



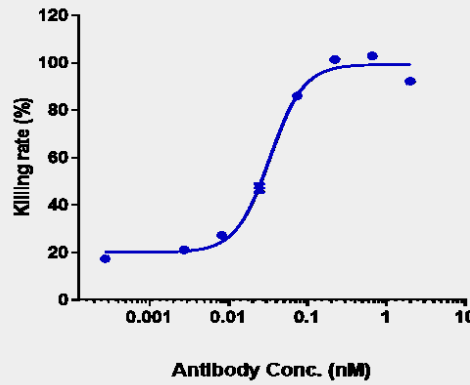
The purity of Anti-TREM1 / CD354 Reference Antibody (PY159) is more than 95%, determined by SEC-HPLC.



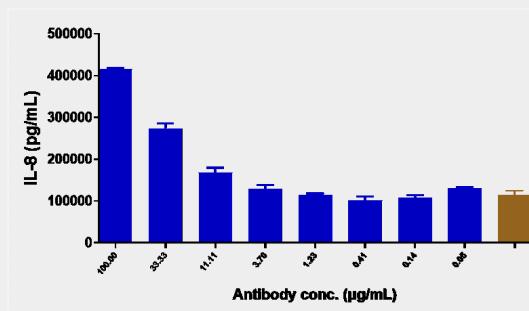
Immobilized human TREM1 His at 2 µg/mL can bind Anti-TREM1 / CD354 Reference Antibody (PY159) $EC_{50}=0.00645$ µg/mL



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