

For Research Use Only

# CD300f Recombinant monoclonal antibody

Catalog Number: 87497-1-RR



## Basic Information

<b>Catalog Number:</b> 87497-1-RR	<b>GenBank Accession Number:</b> GeneID (NCBI): 146722	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>UNIPROT ID:</b> Q8TDQ1	<b>CloneNo.:</b> 252756G8
<b>Source:</b> Rabbit	<b>Full Name:</b> CD300 molecule-like family member	<b>Recommended Dilutions:</b> WB: 1:2000-1:10000 IHC: 1:500-1:2000
<b>Isotype:</b> IgG	<b>Observed MW:</b> 40-60 kDa	
<b>Immunogen Catalog Number:</b> EG10440		

## Applications

### Tested Applications:

WB, IHC, ELISA

### Species Specificity:

human

### Positive Controls:

WB : U-937 cells, HL-60 cells, THP-1 cells

IHC : human tonsillitis tissue,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

CD300f (also known as CLM-1 or IREM-1) is a type I transmembrane glycoprotein belonging to the CD300 family of immunoreceptors. Expressed predominantly on myeloid cells, including macrophages, dendritic cells, and mast cells, CD300f functions as an inhibitory receptor that regulates immune responses. Its extracellular domain contains a single IgV-like domain that recognizes phosphatidylserine and phosphatidylethanolamine, enabling recognition of apoptotic cells. The cytoplasmic tail harbors immunoreceptor tyrosine-based inhibitory motifs (ITIMs) that recruit phosphatases SHP-1 and SHP-2 upon phosphorylation, delivering negative signals. CD300f plays critical roles in dampening inflammation, promoting efferocytosis, and maintaining immune homeostasis (PMID: 28073916, PMID: 33548578, PMID: 37302321). The predicted molecular weight of CD300f is 32 kDa; however, due to different levels of N- and/or O-linked glycosylation modifications, its molecular weight may range from 40 to 60 kDa (PMID: 15549731, PMID: 31338922).

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

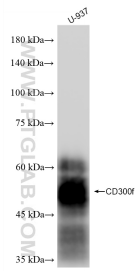
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

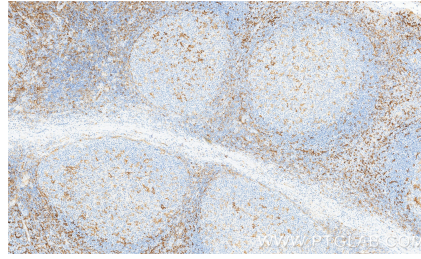
E: proteintech@ptglab.com  
W: ptglab.com

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## Selected Validation Data



U-937 cells were subjected to SDS PAGE followed by western blot with 87497-1-RR (CD300f antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 87497-1-RR (CD300f antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).