

For Research Use Only

# TNFR1/CD120a Recombinant antibody

Catalog Number: 84243-5-RR



## Basic Information

<b>Catalog Number:</b> 84243-5-RR	<b>GenBank Accession Number:</b> BC010140	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul, Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7132	<b>CloneNo.:</b> 241336B4
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P19438	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:1000-1:4000
<b>Isotype:</b> IgG	<b>Full Name:</b> tumor necrosis factor receptor superfamily, member 1A	
	<b>Calculated MW:</b> 455 aa, 50 kDa	
	<b>Observed MW:</b> 55 kDa	

## Applications

### Tested Applications:

WB, IHC, ELISA

### Species Specificity:

human, mouse

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

### Positive Controls:

WB : NIH/3T3 cells, HL-60 cells

IHC : human colon cancer tissue,

## Background Information

Tumor necrosis factor (TNF) is a multifunctional cytokine that plays a key role in regulating inflammation, immune functions, host defense, and apoptosis (PMID: 16407280). TNF exists in soluble and membrane-bound forms. TNF signals through two distinct cell surface receptors, TNFR1 (TNFRSF1A, CD120a) and TNFR2 (TNFRSF1B, CD120b). Whereas TNFR1 is widely expressed, expression of TNFR2 is limited to cells of the immune system, endothelial cells, and nerve cells (PMID: 22053109). TNFR1, which contains a death domain (DD) within its intracytoplasmic region, is thought to be the key receptor for TNF signaling (PMID: 16407280). This receptor can activate NF-kappaB, mediate apoptosis, and function as a regulator of inflammation. Antiapoptotic protein BCL2-associated athanogene 4 (BAG4/SODD) and adaptor proteins TRADD and TRAF2 have been shown to interact with this receptor, and thus play regulatory roles in the signal transduction mediated by the receptor.

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

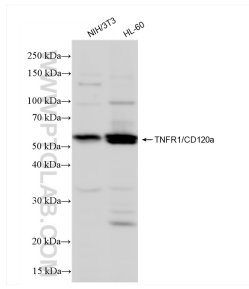
For technical support and original validation data for this product please contact:

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

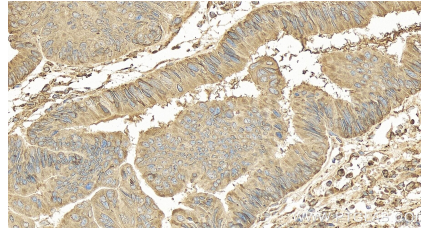
E: proteintech@ptglab.com  
W: ptglab.com

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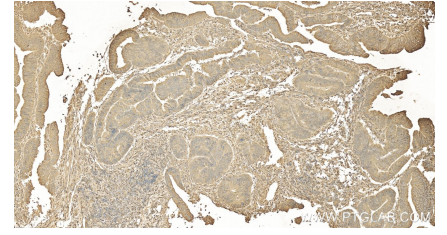
## Selected Validation Data



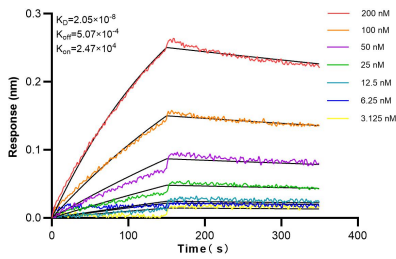
Various lysates were subjected to SDS PAGE followed by western blot with 84243-5-RR (TNFR1/CD120a antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84243-5-RR (TNFR1/CD120a antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84243-5-RR (TNFR1/CD120a antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84243-5-RR against Human TNFR1/CD120a were performed. The affinity constant is 20.5 nM.