

For Research Use Only

# TNFR1 Polyclonal antibody

Catalog Number: 21574-1-AP

Featured Product

20 Publications



## Basic Information

<b>Catalog Number:</b> 21574-1-AP	<b>GenBank Accession Number:</b> BC010140	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 300 µg/ml by Nanodrop and 267 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 7132	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> tumor necrosis factor receptor superfamily, member 1A	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 455 aa, 50 kDa	
<b>Immunogen Catalog Number:</b> AG16112	<b>Observed MW:</b> 50 kDa	

## Applications

### Tested Applications:

FC, IHC, WB, ELISA

### Cited Applications:

IF, IHC, IP, WB

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, rat

**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: Raji cells, HeLa cells, HL-60 cells, human brain tissue

IHC: human brain tissue, human breast 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- $\kappa$ B, 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiaoyu Wang	34539352	Front Cell Neurosci	WB, IF
Dongsheng Nie	26607717	Biol Reprod	WB
Xixi Chang	29170425	Sci Rep	WB

## 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

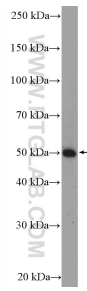
For technical support and original validation data for this product please contact:

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

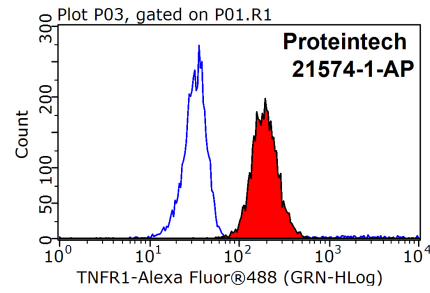
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

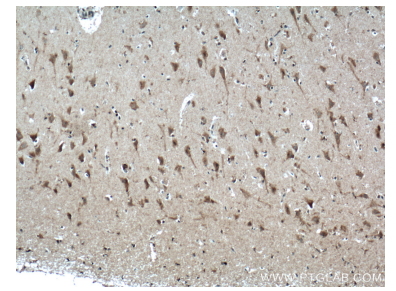
## Selected Validation Data



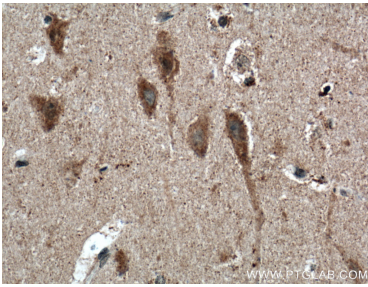
Raji cells were subjected to SDS PAGE followed by western blot with 21574-1-AP (TNFR1 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



$1 \times 10^6$  Raji cells were stained with 0.2ug TNFR1 antibody (21574-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 21574-1-AP (TNFR1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 21574-1-AP (TNFR1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).