

For Research Use Only

# TNF-alpha Polyclonal antibody

Catalog Number: 17590-1-AP **786 Publications**



## Basic Information

<b>Catalog Number:</b> 17590-1-AP	<b>GenBank Accession Number:</b> BC028148	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 600 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7124	<b>Recommended Dilutions:</b> WB: 1:500-1:2000 IF/ICC: 1:50-1:500
<b>Source:</b> Rabbit	<b>ENSEMBL Gene ID:</b> ENSG00000232810	
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P01375	
<b>Immunogen Catalog Number:</b> AG11433	<b>Full Name:</b> tumor necrosis factor (TNF superfamily, member 2)	
	<b>Calculated MW:</b> 233 aa, 26 kDa	
	<b>Observed MW:</b> 26 kDa	

## Applications

<b>Tested Applications:</b> WB, IF/ICC, ELISA	<b>Positive Controls:</b> WB : THP-1 cells, LPS treated RAW 264.7 cells
<b>Cited Applications:</b> WB, IHC, IF, ELISA, Cell treatment, Transwell Assay	<b>IF/ICC :</b> PMA, LPS and Brefeldin A treated THP-1 cells,
<b>Species Specificity:</b> human, mouse	
<b>Cited Species:</b> human, mouse, rat, rabbit, bovine, sheep, fish	

## Background Information

TNF, as also known as TNF-alpha, or cachectin, is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. It is expressed as a 26 kDa membrane bound protein and is then cleaved by TNF-alpha converting enzyme (TACE) to release the soluble 17 kDa monomer, which forms homotrimers in circulation. It is produced chiefly by activated macrophages, although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells, neutrophils, mast cells, eosinophils, and neurons. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, ins resistance, and cancer.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yangmeng Zhao	36178125	Redox Rep	Cell treatment
Yangfei Yi	36178080	Orthop Surg	WB
Yanliang Wu	34601083	J Ethnopharmacol	WB

## Storage

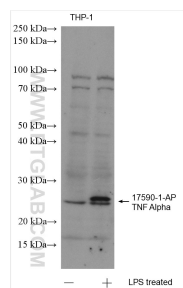
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

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

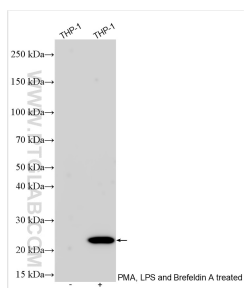
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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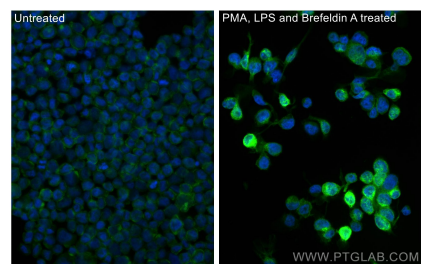
## Selected Validation Data



Untreated THP-1 and THP-1 (treated with 80nM PMA overnight, replaced the culture medium with 100 ng/ml LPS for 6 hours with addition of 300ng/ml Brefeldin A for the last 3 hours) cells were subjected to SDS PAGE followed by western blot with 17590-1-AP (TNF Alpha antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Untreated THP-1 and THP-1 (treated with 80nM PMA overnight, replaced the culture medium with 100 ng/ml LPS for 6 hours with addition of 300ng/ml Brefeldin A for the last 3 hours) cells were subjected to SDS PAGE followed by western blot with 17590-1-AP (TNF-alpha antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed PMA, LPS and Brefeldin A treated THP-1 cells using TNF-alpha antibody (17590-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).