

For Research Use Only

# TNF-alpha Monoclonal antibody

Catalog Number: 60291-1-Ig

Featured Product

605 Publications



## Basic Information

<b>Catalog Number:</b> 60291-1-Ig	<b>GenBank Accession Number:</b> BC028148	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 2000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 7124	<b>CloneNo.:</b> 7B8A11
<b>Source:</b> Mouse	<b>ENSEMBL Gene ID:</b> ENSG00000232810	<b>Recommended Dilutions:</b> WB: 1:1000-1:4000 IHC: 1:200-1:800 IF-P: 1:50-1:500 IF/ICC: 1:200-1:800
<b>Isotype:</b> IgG2b	<b>UNIPROT ID:</b> P01375	
<b>Immunogen Catalog Number:</b> AG11413	<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, IHC, IF/ICC, IF-P, ELISA	<b>Positive Controls:</b> WB: THP-1 cells, HeLa cells
<b>Cited Applications:</b> WB, IHC, IF, RIP, ELISA	<b>IHC:</b> human breast cancer tissue, human tonsillitis tissue
<b>Species Specificity:</b> human, rat	<b>IF-P:</b> human breast cancer tissue,
<b>Cited Species:</b> human, mouse, rat, pig, rabbit, monkey, chicken, bovine, duck	<b>IF/ICC:</b> PMA, LPS and Brefeldin A treated THP-1 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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/TNFR. 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
Yang Liu	36175851	BMC Mol Cell Biol	IF
Yuqian Wang	32942847	J Agric Food Chem	WB
Xinmei Huang	34478541	J Clin Endocrinol Metab	IHC

## Storage

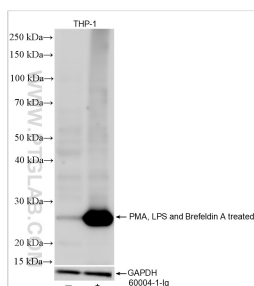
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

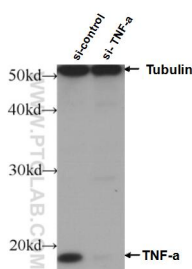
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

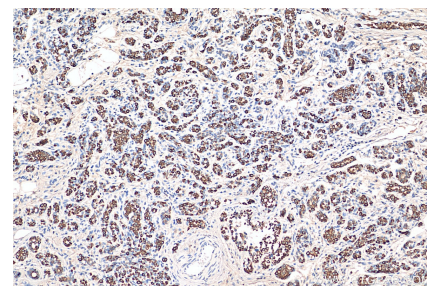
## Selected Validation Data



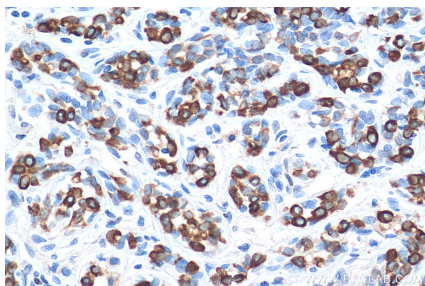
PMA, LPS, and Brefeldin A treated THP-1 cells were subjected to SDS PAGE followed by western blot with 60291-1-Ig (TNF Alpha antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with GAPDH Monoclonal antibody 60004-1-Ig as loading control.



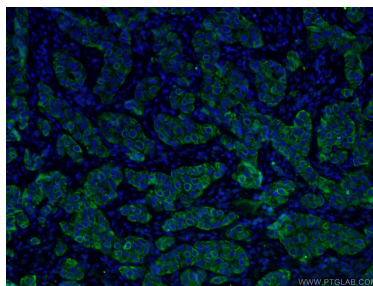
WB result of TNF alpha antibody (60291-1-Ig; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TNF alpha transfected HeLa cells.



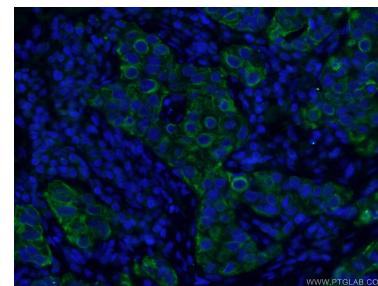
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60291-1-Ig (TNF Alpha antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



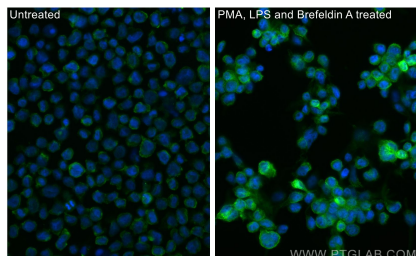
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 60291-1-Ig (TNF Alpha antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 60291-1-Ig (TNF alpha antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 60291-1-Ig (TNF alpha antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed PMA, LPS and Brefeldin A treated THP-1 cells using TNF-alpha antibody (60291-1-Ig, Clone: 7B8A11) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).