

TNF- α Polyclonal Antibody

Catalog # AP72872

Product Information

Application	WB, IHC-P, IF
Primary Accession	P01375
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	25644

Additional Information

Gene ID	7124
Other Names	TNF; TNFA; TNFSF2; Tumor necrosis factor; Cachectin; TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	TNF
Synonyms	TNFA, TNFSF2
Function	Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia. Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T- cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Up-regulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed: 23396208). Key mediator of cell death in the anticancer action of BCG-stimulated neutrophils in combination with DIABLO/SMAC mimetic in the RT4v6 bladder cancer cell line (PubMed: 16829952 , PubMed: 22517918 , PubMed: 23396208). Induces insulin resistance in adipocytes via inhibition of insulin-induced IRS1 tyrosine phosphorylation and insulin-induced glucose uptake. Induces GKAP42 protein degradation in adipocytes which is partially responsible for TNF-induced

insulin resistance (By similarity). Plays a role in angiogenesis by inducing VEGF production synergistically with IL1B and IL6 (PubMed:[12794819](#)). Promotes osteoclastogenesis and therefore mediates bone resorption (By similarity).

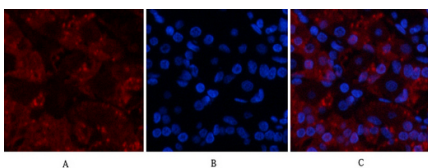
Cellular Location

Cell membrane; Single-pass type II membrane protein [Tumor necrosis factor, soluble form]; Secreted [C-domain 2]; Secreted.

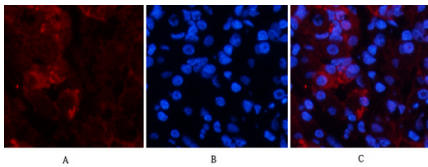
Background

Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Upregulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:[23396208](#)). Key mediator of cell death in the anticancer action of BCG-stimulated neutrophils in combination with DIABLO/SMAC mimetic in the RT4v6 bladder cancer cell line (PubMed:[22517918](#), PubMed:[16829952](#), PubMed:[23396208](#)). Induces insulin resistance in adipocytes via inhibition of insulin-induced IRS1 tyrosine phosphorylation and insulin-induced glucose uptake. Induces GKAP42 protein degradation in adipocytes which is partially responsible for TNF-induced insulin resistance (By similarity).

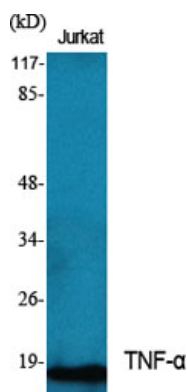
Images



Immunofluorescence analysis of human-stomach tissue. 1, TNF- α Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

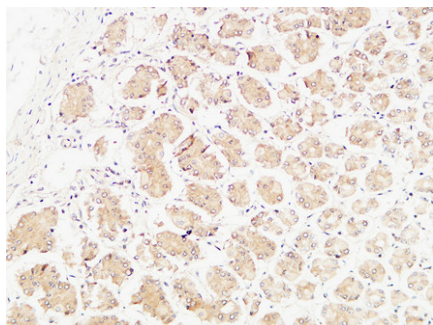
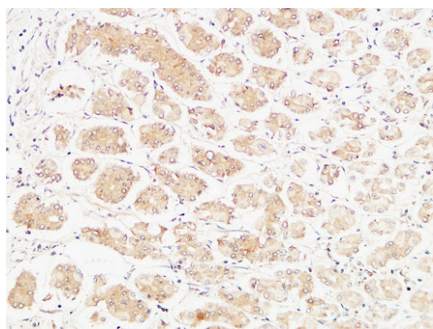


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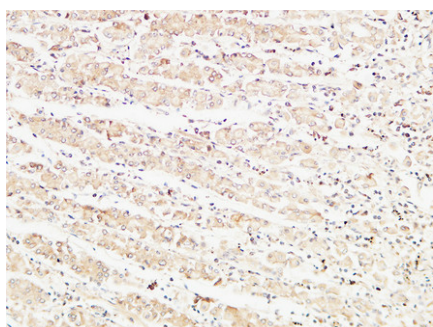


Western Blot analysis of various cells using TNF- α Polyclonal Antibody. Secondary antibody was diluted at 1:20000

Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:100 (4°C, overnight). 2, High-pressure and temperature EDTA, pH 8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min).



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