

TNF Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13532b

Specification

TNF Antibody (C-term) - Product Information

Application	FC, WB,E
Primary Accession	P01375
Other Accession	NP_000585.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	25644
Antigen Region	187-216

TNF Antibody (C-term) - Additional Information

Gene ID 7124

Other Names

Tumor necrosis factor, Cachectin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a, Tumor necrosis factor, membrane form, N-terminal fragment, NTF, Intracellular domain 1, ICD1, Intracellular domain 2, ICD2, C-domain 1, C-domain 2, Tumor necrosis factor, soluble form, TNF, TNFA, TNFSF2

Target/Specificity

This TNF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 187-216 amino acids from the C-terminal region of human TNF.

Dilution

FC~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TNF Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TNF Antibody (C-term) - 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

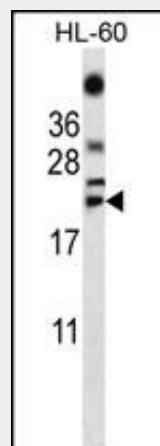
Cell membrane; Single-pass type II membrane protein [Tumor necrosis factor, soluble form]: Secreted [C-domain 2]: Secreted.

TNF Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

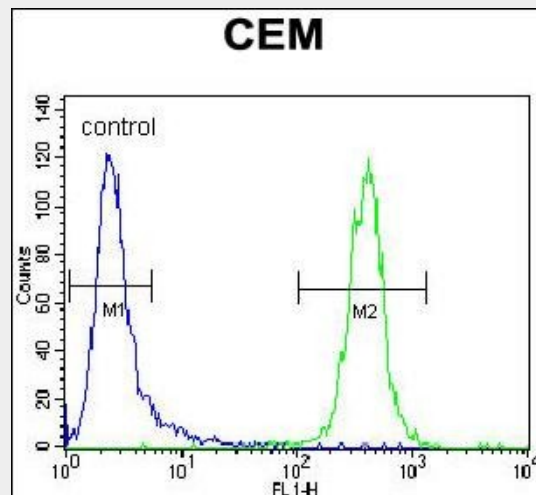
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TNF Antibody (C-term) - Images



TNF Antibody (C-term) (Cat. #AP13532b) western blot analysis in HL-60 cell line lysates

(35ug/lane). This demonstrates the TNF antibody detected the TNF protein (arrow).



TNF Antibody (C-term) (Cat. #AP13532b) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

TNF Antibody (C-term) - Background

This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. 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, insulin resistance, and cancer. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

TNF Antibody (C-term) - References

Majewski, P.M., et al. *J. Biol. Chem.* 285(45):34828-34838(2010)
Kwon, H.J., et al. *J. Immunol.* 185(7):3980-3989(2010)
Muller, T., et al. *Scand. J. Immunol.* 72(4):365-371(2010)
Qin, H., et al. *J. Int. Med. Res.* 38(3):760-768(2010)
Acharyya, S., et al. *PLoS ONE* 5 (8), E12479 (2010) :

TNF Antibody (C-term) - Citations

- [Protective Effects and Mechanism of Meretrix meretrix Oligopeptides against Nonalcoholic Fatty Liver Disease.](#)