

**TNF-alpha Antibody**  
**Purified Rabbit Polyclonal Antibody**  
**Catalog # ABV11494****Specification**

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**TNF-alpha Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P01375</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	25644

**TNF-alpha Antibody - 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**

TNF-a

**Formulation**

100 µg (0.5 mg/ml) antigen affinity purified rabbit anti-mTNF-α polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol and 0.02% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Background Descriptions****Precautions**

TNF-alpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**TNF-alpha Antibody - 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:<a href="http://www.uniprot.org/citations/23396208" target="\_blank">23396208</a>). 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:<a href="http://www.uniprot.org/citations/22517918" target="\_blank">22517918</a>, PubMed:<a href="http://www.uniprot.org/citations/16829952" target="\_blank">16829952</a>, PubMed:<a href="http://www.uniprot.org/citations/23396208" target="\_blank">23396208</a>). 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:<a href="http://www.uniprot.org/citations/12794819" target="\_blank">12794819</a>). Promotes osteoclastogenesis and therefore mediates bone resorption (By similarity).

#### Cellular Location

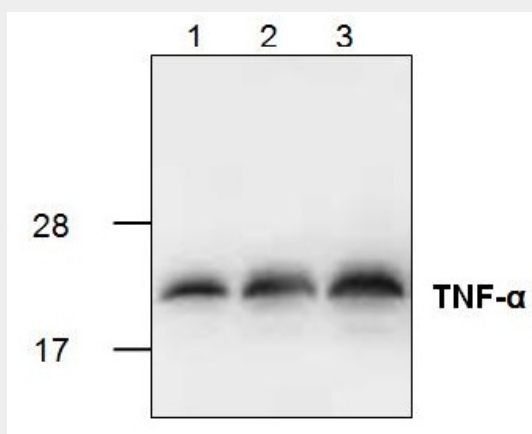
Cell membrane; Single-pass type II membrane protein [Tumor necrosis factor, soluble form]: Secreted [C-domain 2]: Secreted.

#### TNF-alpha Antibody - 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-alpha Antibody - Images



Western blot analysis using recombinant murine TNF- $\alpha$ . Lane1: 20ng; Lane2: 50ng; Lane3: 100ng

#### **TNF-alpha Antibody - Background**

Tumor Necrosis Factor-alpha (TNF- $\alpha$ ) is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells and certain other target cells. Murine TNF- $\alpha$  is a 17.5 kDa protein containing 156 amino acid residues.