

# **Product datasheet for TA336738**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## TNF alpha (TNF) Rabbit Polyclonal Antibody

#### **Product data:**

Product Type: Primary Antibodies

Applications: FC, ICC/IF, IHC, WB

Recommended Dilution: Immunocytochemistry/ Immunofluorescence: 1:200 - 1:300, Flow Cytometry,

Immunohistochemistry: 1:200, Immunohistochemistry-Paraffin: 1:200, Western Blot: 1:250 -

1:500, Immunohistochemistry Free-Floating, Immunohistochemistry-Frozen

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** A synthetic peptide made to an internal portion of the human TNF alpha protein (between

residues 100-200) [UniProt P01375]

Formulation: PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

**Concentration:** lot specific

**Purification:** Immunogen affinity purified

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** tumor necrosis factor

Database Link: NP 000585

Entrez Gene 21926 MouseEntrez Gene 24835 RatEntrez Gene 7124 Human

P01375





Background:

Tumor Necrosis Factor Alpha (TNF alpha) is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages and causes tumor necrosis when injected into tumour bearing mice. TNF alpha exists as a multimer of two, three, or five noncovalently linked units, but shows a single 17 kDa band following SDS PAGE under non reducing conditions. TNF alpha is closely related to the 25 kDa protein Tumour Necrosis Factor beta (lymphotoxin), sharing the same receptors and cellular actions. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid etabolism, and coagulation and it has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Knockout studies in mice also suggested the europrotective function of this cytokine. TNF alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.

**Synonyms:** DIF; TNF-alpha; TNFA; TNFSF2

**Note:** Western Blot data from customer review and citation (PMID: 24223475). Predicted reactivity:

Porcine (100%), Canine (90%), Feline (100%), Mustelid (90%), Primate (90%).

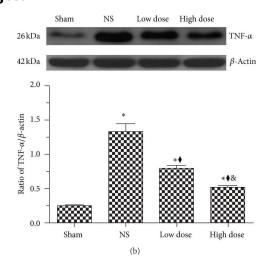
**Protein Families:** Druggable Genome, Secreted Protein, Transcription Factors, Transmembrane

**Protein Pathways:** Adipocytokine signaling pathway, Allograft rejection, Alzheimer's disease, Amyotrophic lateral

sclerosis (ALS), Apoptosis, Asthma, Cytokine-cytokine receptor interaction, Dilated cardiomyopathy, Fc epsilon RI signaling pathway, Graft-versus-host disease, Hematopoietic cell lineage, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Natural killer cell mediated cytotoxicity, NOD-like receptor signaling pathway, RIG-I-like receptor signaling pathway, Systemic lupus erythematosus, T cell receptor signaling pathway, TGF-beta signaling pathway, Toll-like receptor signaling pathway, Type I diabetes mellitus, Type II diabetes

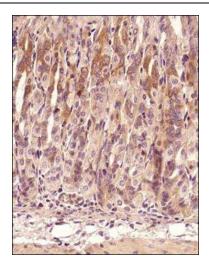
mellitus

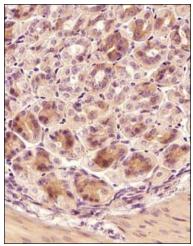
### **Product images:**

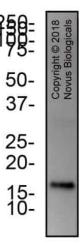


Scutellarin attenuates hypertension-induced brain expression of NF- $\kappa$ B, TNF- $\alpha$ , IL-1 $\beta$ , and IL-18. Western immunoblot analysis for (a) NF- $\kappa$ B p65, (b) TNF- $\alpha$ , (c) IL-1 $\beta$ , and (d) IL-18 in the rat cortex and striatum. Treatment with scutellarin significantly reduced the expression of these inflammatory markers in a dose-dependent manner. \*P < 0.001 versus sham group; #P < 0.05,  $\Phi$ P < 0.001 versus NS group; &P < 0.001 versus low-dose group.









Immunohistochemistry-Paraffin: TNF-alpha Antibody TA336738 - Analysis of a FFPE tissue section of mouse intestine using TNF-alpha antibody (TA336738) at 1:300 dilution. The binding of this primary antibody to TNF-alpha protein in the section was detected using HRP-labeled secondary antibody and DAB reagent, and nuclei of cells were counterstained using hematoxylin. This TNF-alpha antibody generated an expected diffused immunostaining of this protein in the tested tissue. Staining was primarily observed in the epithelial cells and some cells showed membrane positivity also.

Immunohistochemistry-Paraffin: TNF-alpha Antibody TA336738 - Analysis of a FFPE tissue section of mouse intestine using TNF-alpha antibody (TA336738) at 1:300 dilution. The binding of this primary antibody to TNF-alpha protein in the section was detected using HRP-labeled secondary antibody and DAB reagent, and nuclei of cells were counterstained using hematoxylin. This TNF-alpha antibody generated an expected immunopositivity of this protein in the tested tissue. Staining was primarily observed in the epithelial cells while some staining was present in mucosa muscularis also.

Western Blot: TNF-alpha Antibody TA336738 - Recombinant human TNF alpha (10 ng) was separated on a 12% gel by SDS-PAGE, transferred to 0.2 um PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-TNF alpha in 5% block buffer and detected with an anti-rabbit HRP secondary antibody using chemiluminescence.