

ARG66838 anti-TNF alpha antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TNF alpha
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TNF alpha
Species	Human
Immunogen	Synthetic peptide between aa. 141-190 of Human TNF alpha.
Conjugation	Un-conjugated
Alternate Names	Tumor necrosis factor ligand superfamily member 2; DIF; Cachectin; ICD2; ICD1; N-terminal fragment; TNF-a; TNFA; TNFSF2; TNF-alpha; Tumor necrosis factor; NTF

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-P	1:100 - 1:300
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: EDTA buffer (pH 8.0) at high pressure and temperature. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Jurkat	
Observed Size	~ 18 kDa	

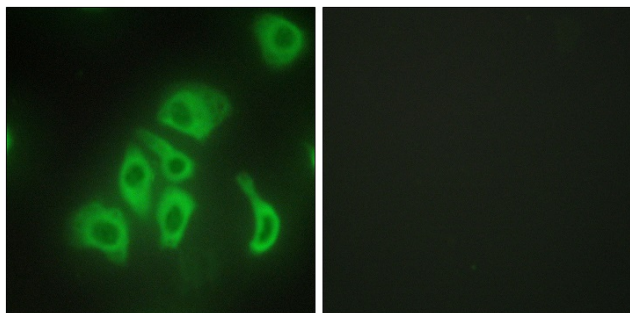
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

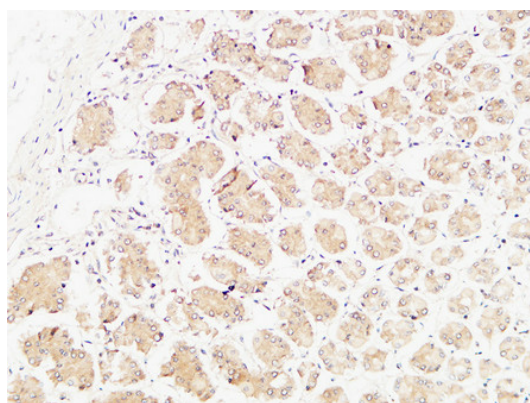
Bioinformation

Gene Symbol	TNF
Gene Full Name	tumor necrosis factor
Function	<p>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).</p> <p>The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells. [UniProt]</p>
Highlight	<p>Related products: TNF alpha antibodies; TNF alpha ELISA Kits; TNF alpha Duos / Panels; TNF alpha recombinant proteins; Anti-Rabbit IgG secondary antibodies;</p> <p>Related news: HMGB1 in inflammation Inflammatory Cytokines</p>
Calculated Mw	26 kDa
PTM	<p>The soluble form derives from the membrane form by proteolytic processing. The membrane-bound form is further proteolytically processed by SPPL2A or SPPL2B through regulated intramembrane proteolysis producing TNF intracellular domains (ICD1 and ICD2) released in the cytosol and TNF C-domain 1 and C-domain 2 secreted into the extracellular space.</p> <p>The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1.</p> <p>O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid. [UniProt]</p>
Cellular Localization	<p>Cell membrane; Single-pass type II membrane protein. Tumor necrosis factor, membrane form: Membrane; Single-pass type II membrane protein. Tumor necrosis factor, soluble form: Secreted. C-domain 1: Secreted. C-domain 2: Secreted. [UniProt]</p>



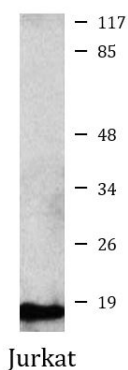
ARG66838 anti-TNF alpha antibody ICC/IF image

Immunofluorescence: HepG2 cells stained with ARG66838 anti-TNF alpha antibody. The picture on the right is blocked with the synthetic peptide.



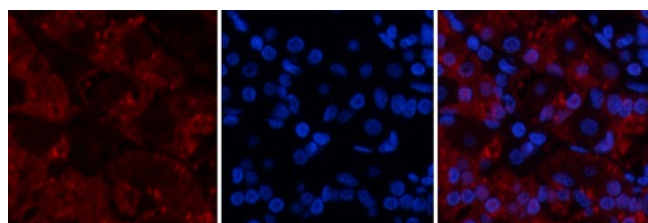
ARG66838 anti-TNF alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human stomach tissue. Antigen Retrieval: EDTA buffer (pH 8.0) at high pressure and temperature. The tissue section was stained with ARG66838 anti-TNF alpha antibody at 1:100 dilution, overnight at 4°C.



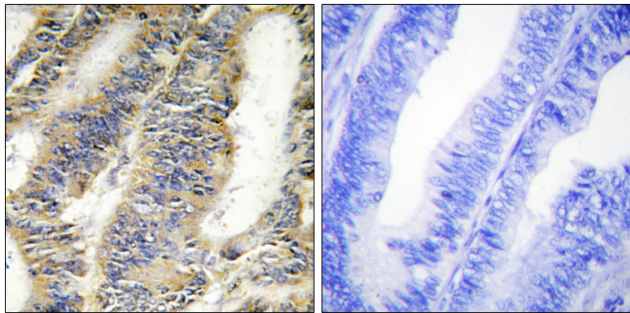
ARG66838 anti-TNF alpha antibody WB image

Western blot: Jurkat cell lysate stained with ARG66838 anti-TNF alpha antibody.



ARG66838 anti-TNF alpha antibody IHC image

Immunohistochemistry: Human stomach tissue stained with ARG66838 anti-TNF alpha antibody (red) at 1:200 dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



ARG66838 anti-TNF alpha antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon carcinoma tissue stained with ARG66838 anti-TNF alpha antibody. The picture on the right is blocked with the synthetic peptide.