abcam

ab9348

Anti-TNF alpha antibody [2.1_4E10-1H11]

Lab Essentials

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Standard buffer
Form	Lyophilized
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human TNF. Database link P01375
Clone number	2.1_4E10-1H11
Purification technique	Affinity purification Protein G
Light chain type	kappa
Reconstitution	reconstitute with water at 500µL
Purification notes	This antibody was purified from cell culture by Protein G affinity chromatography.

Reactivity data

Flow Cyt

Expected

Species	Recombinant fragment - Human
Dilution info	-

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Species	Human
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

sELISA

Tested

Species	Recombinant full length protein - Human
Dilution info	2-4 µg/mL
Notes	In a sandwich ELISA (assuming 100µl/well), a concentration of 2.0-4.0 µg/ml of this antibody will detect at least 1000 pg/ml of recombinant Human TNF-α when used with an appropriate biotinylated antigen affinity purified anti-Human TNF-α as the detection antibody at a concentration of approximately 0.5-1.0 µg/ml.

Predicted

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-P

Expected

Species	Recombinant fragment - Human, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information TNF

Function	Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. 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). The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Notes

This product is no longer batch tested in IHC, for an IHC validated antibody please see ab1793.
Monoclonal antibodies were produced in BALB/c x C57BL/6 F1 mice

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

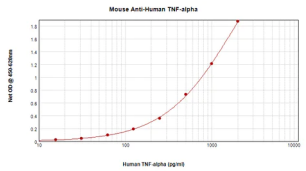
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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Terms & Conditions.

1 product image



Sandwich ELISA - Anti-TNF alpha antibody [2.1_4E10-1H11] (ab9348)

In a sandwich ELISA (assuming 100µl/well), a concentration of 2.0-4.0 µg/ml of this antibody will detect at least 1000 pg/ml of Recombinant Human TNF-α when used with suitable detection antibody at a concentration of at least 0.5-1.0 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.