

TNF Alpha Antibody (clone 2C8)

Mouse Monoclonal Antibody Catalog # ALS14918

Specification

TNF Alpha Antibody (clone 2C8) - Product Information

Application IHC
Primary Accession P01375
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 26kDa KDa

TNF Alpha Antibody (clone 2C8) - 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

human TNF-a 100%

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

TNF Alpha Antibody (clone 2C8) is for research use only and not for use in diagnostic or therapeutic procedures.

TNF Alpha Antibody (clone 2C8) - Protein Information

Name TNF

Synonyms TNFA, TNFSF2

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:<a href="http://www.uniprot.org/citations/23396208"



target="_blank">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). 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 Alpha Antibody (clone 2C8) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

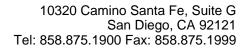
TNF Alpha Antibody (clone 2C8) - Images



Anti-TNF Alpha antibody IHC of human lung, macrophages.

TNF Alpha Antibody (clone 2C8) - Background

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TNF Alpha Antibody (clone 2C8) - References

Nedospasov S.A.,et al.Cold Spring Harb. Symp. Quant. Biol. 51:611-624(1986). Pennica D.,et al.Nature 312:724-729(1984). Shirai T.,et al.Nature 313:803-806(1985). Nedwin G.E.,et al.Nucleic Acids Res. 13:6361-6373(1985). Wang A.M.,et al.Science 228:149-154(1985).