Anti-TNF alpha (Infliximab), Human IgG1 Antibody

CATALOG NO: A1097-200

ALTERNATIVE NAMES: TNF-α; TNFα; TNFSF; Tumor necrosis factor; Cachectin; TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a; TNFa

AMOUNT: 200 µg

ISOTYPE / FORMAT: Human IgG1, kappa

CLONALITY: Monoclonal

CLONE: cA2

SPECIES REACTIVITY: Human

FORM: Liquid

IMMUNOGEN: Purified recombinant human TNF (rTNF)

SPECIFICITY: Binds to soluble and transmembrane forms of TNF-alpha and neutralizes its biological activity. Does not bind to TNF-beta.

PURIFICATION: Affinity purified using Protein A

FORMULATION: Supplied in PBS with preservative (0.02% Proclin 300)

STORAGE CONDITIONS: Store at 4°C for upto 3 months. For long term storage, aliquot and freeze at -20°C. Avoid repeated freeze/thaw cycles.

DESCRIPTION: Recombinant monoclonal antibody to TNF alpha. Manufactured using recombinant technology with variable regions (i.e. specificity) from the therapeutic antibody cA2 (Infliximab).

BACKGROUND: 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. 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. 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.

APPLICATION: ELISA; in vivo; FC


Western Blot using anti-TNF alpha antibody: Mouse liver (lane 1), mouse spinal cord (lane 2), mouse testis (lane 3), mouse colon (lane 4) and human thyroid tumour (lane 5) samples were resolved on a 10% SDS PAGE gel and blots probed with at 1.5 µg/ml before being detected by a secondary antibody. The expected band size (269 KDa) is seen in the human-derived samples, as well as a band corresponding to dimers.

RELATED PRODUCTS:

- Anti-VEGF (Bevacizumab), humanized Antibody (Cat. No. A1045-100)
- Anti-HER2 (Trastuzumab), humanized Antibody (Cat. No. A1046-100)
- Anti-EGFR (Cetuximab), Chimeric Antibody (Cat. No. A1047-100)
- Anti-TNF-α (Adalimumab), humanized Antibody (Cat. No. A1048-100)
- Anti-CD20 (Rituximab), Chimeric Antibody (Cat. No. A1049-100)
- Anti-EGFR (Panitumumab), humanized antibody (Cat. No. A1050-100)
- Anti-OX40L (Oxelumab), Human IgG1 Antibody (Cat. No. A1088-200)
- Anti-CD11a (Eflalizumab), Human IgG1 Antibody (Cat. No. A1089-200)
- Anti-EGFR (Matuzumab), Human IgG1 Antibody (Cat. No. A1090-200)
- Anti-CD4 (Clenoliximab), Human IgG4 Antibody (Cat. No. A1091-200)
- Anti-TNF alpha (Humicade), Human IgG4 Antibody (Cat. No. A1093-200)
- Anti-CD40L (Ruplizumab), Human IgG1 Antibody (Cat. No. A1094-200)
- Anti-IL-2R alpha (CD25) (Basiliximab), Human IgG1 Antibody (Cat. No. A1098-200)

FOR RESEARCH USE ONLY! Not to be used on humans.