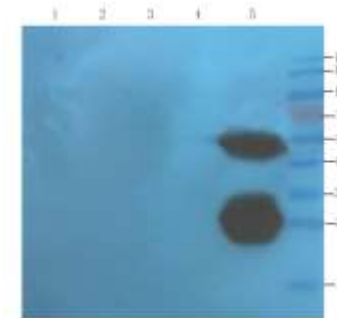


## Anti-TNF alpha, Human IgG1 Antibody (cA2)

|                            |   |
|----------------------------|---|
| <b>CATALOG NO:</b>         | A1097-200   |
| <b>ALTERNATIVE NAMES:</b>  | TNF- $\alpha$ ; TNF $\alpha$ ; TNFSF; Tumor necrosis factor; Cachectin; TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a; TNFa   |
| <b>AMOUNT:</b>             | 200 $\mu$ g   |
| <b>ISOTYPE / FORMAT:</b>   | Human IgG1, kappa   |
| <b>CLONALITY:</b>          | Monoclonal  |
| <b>CLONE:</b>              | cA2   |
| <b>SPECIES REACTIVITY:</b> | Human   |
| <b>FORM:</b>               | Liquid  |
| <b>IMMUNOGEN:</b>          | Purified recombinant human TNF (rTNF)   |
| <b>SPECIFICITY:</b>        | Binds to soluble and transmembrane forms of TNF-alpha. Does not bind to TNF-beta.   |
| <b>PURIFICATION:</b>       | Affinity purified using Protein A   |
| <b>FORMULATION:</b>        | Supplied in PBS with preservative (0.02% Proclin 300)   |
| <b>STORAGE CONDITIONS:</b> | Store at 4 °C for up to 3 months. For long term storage, aliquot and freeze at -20 °C. Avoid repeated freeze/defrost cycles.  |
| <b>DESCRIPTION:</b>        | Recombinant monoclonal antibody to TNF alpha. Manufactured using recombinant technology with variable regions (i.e. specificity) that target human TNF alpha.   |
| <b>BACKGROUND:</b>         | Cytokine that binds to TNFRSF1A / TNFR1 and TNFRSF1B / TNFR2. 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, TNF alpha 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. |
| <b>APPLICATION:</b>        | ELISA; in vivo; FC  |

**REFERENCE:** Knight DM, Trinh H, Le J, Siegel S, Shealy D, McDonough M, Scallon B, Moore MA, Vilcek J, Daddona P, et al. Construction and initial characterization of a mouse-human chimeric anti-TNF antibody. Mol Immunol. 1993 Nov;30 (16):1443-53.



**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  $\mu$ g/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, humanized Antibody (Cat. No. A1045-100)
- Anti-HER2, humanized Antibody (Cat. No. A1046-100)
- Anti-EGFR, Chimeric Antibody (Cat. No. A1047-100)
- Anti-TNF- $\alpha$ , humanized Antibody (Cat. No. A1048-100)
- Anti-CD20, Chimeric Antibody (Cat. No. A1049-100)
- Anti-EGFR, humanized antibody (Cat. No. A1050-100)
- Anti-OX40L, Human IgG1 Antibody (Cat. No. A1088-200)
- Anti-CD11a, Human IgG1 Antibody (Cat. No. A1089-200)
- Anti-EGFR, Human IgG1 Antibody (Cat. No. A1090-200)
- Anti-CD4, Human IgG4 Antibody (Cat. No. A1091-200)
- Anti-TNF alpha, Human IgG4 Antibody (Cat. No. A1093-200)
- Anti-CD40L, Human IgG1 Antibody (Cat. No. A1094-200)
- Anti-IL-2R alpha (CD25), Human IgG1 Antibody (Cat. No. A1098-200)

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