

NeutraControl TNF-alpha Monoclonal antibody

Catalog Number: 69502-1-Ig

Basic Information

| | | |
|---------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------|
| Catalog Number: 69502-1-Ig | GenBank Accession Number: GeneID (NCBI): 7124 | Purification Method: Protein G purification |
| Size: Source: Mouse | ENSEMBL Gene ID: ENSG00000232810 | CloneNo.: 1A3A3 |
| Isotype: IgG1 | Full Name: tumor necrosis factor (TNF superfamily, member 2) | |
| Immunogen Catalog Number: HZ-1014 | | |

Applications

Tested Applications:
ELISA, Non-Neutralization

Species Specificity:
human, mouse

Background Information

TNF, as also known as TNF-alpha, or cachectin, is a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. It is expressed as a 26 kDa membrane bound protein and is then cleaved by TNF-alpha converting enzyme (TACE) to release the soluble 17 kDa monomer, which forms homotrimers in circulation. It is produced chiefly by activated macrophages, although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells, neutrophils, mast cells, eosinophils, and neurons. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, INS resistance, and cancer.

This antibody is a neutralizing control antibody for TNF alpha, the immunogen is the same as Neutrakine 69002-1-Ig but could not neutralize human TNF alpha.

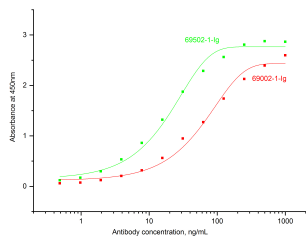
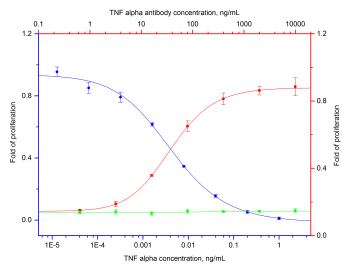
Storage

Storage:
Lyophilized antibodies are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at(4°C) for short term or at(-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

Storage Buffer:
Sterile PBS.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Recombinant human TNF alpha (Cat.NO. HZ-1014) inhibits the growth of L-929 cell line in the presence of actinomycin D in a dose dependent manner (blue curve, refer to bottom X-left Y). The activity elicited by recombinant human TNF alpha (0.05 ng/mL HZ-1014) is neutralized by mouse anti-human TNF alpha monoclonal antibody 69002-1-Ig at serial dose (red curve, refer to top X-right Y). The ND50 is typically 10-50 ng/mL. The NeutraControl mouse anti-human TNF alpha

Indirect ELISA was carried out by coating recombinant Human TNF Alpha (Cat.NO. HZ-1014) at 70 ng/well followed by blocking and adding serial diluted TNF Alpha antibody 69002-1-Ig and 69502-1-Ig respectively. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm.