

For Research Use Only

TNF-alpha Recombinant monoclonal antibody

Catalog Number:83721-6-RR



Basic Information

Catalog Number:

83721-6-RR

Size:

100ul , Concentration: 1000 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

EG0816

GenBank Accession Number:

NM_000594.4

GeneID (NCBI):

7124

ENSEMBL Gene ID:

ENSG00000232810

UNIPROT ID:

P01375

Full Name:

tumor necrosis factor (TNF superfamily, member 2)

Calculated MW:

26 kDa

Purification Method:

Protein A purification

CloneNo.:

240668A4

Recommended Dilutions:

FC (Intra): 0.25 ug per 10⁶ cells in a 100 µl suspension

ELISA: 1:10-1:100

Applications

Tested Applications:

FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

FC (Intra) : PMA, Ionomycin and Brefeldin A treated human PBMCs,

ELISA : human PBMCs, peptide

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.

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

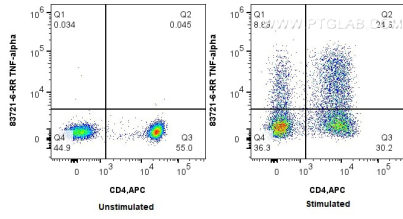
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

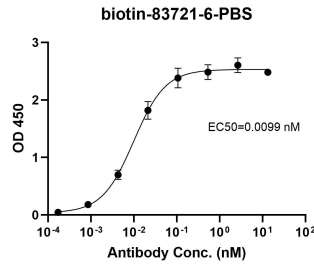
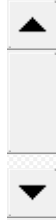
E: proteintech@ptglab.com
W: ptglab.com

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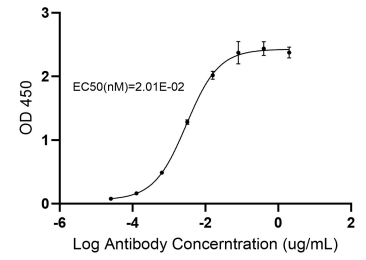
Selected Validation Data



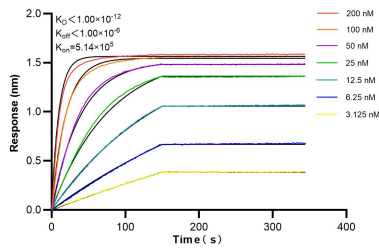
1x10⁶ untreated or PMA, Ionomycin and Brefeldin A treated human PBMCs were intracellularly stained with 0.25 ug TNF-Alpha Recombinant Antibody (83721-6-RR, Clone:240668A4) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), and 0.25 ug APC Anti-Human CD4 (RPA-T4) (APC-65143, Clone: RPA-T4), and 0.25 ug Control Antibody. Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation &



1x10⁶ untreated or PMA, Ionomycin and Brefeldin A treated human PBMCs were intracellularly stained with 0.25 ug TNF-alpha Recombinant antibody, PBS Only (Detector) (83721-6-PBS, Clone:240668A4) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), or 0.25 ug APC Anti-Human CD4 (RPA-T4) (APC-65143, Clone: RPA-T4). Cells were fixed and permeabilized with Intracellular Flow Cytometry Fixation &



ELISA was performed using antibody 83721-6-RR at concentrations ranging from 0.02 to 2000 ng/mL to detect the TNF-alpha peptide. HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody at a 1:10,000 dilution.



Biolayer interferometry (BLI) kinetic assays of 83721-6-RR against Human TNF-alpha were performed. The affinity constant is below 1 pM.