

For Research Use Only

Anti-Human CD28 Rabbit Recombinant Antibody, Functional Grade

Catalog Number: 98032-1-FG



Basic Information

Catalog Number:

98032-1-FG

Concentration:

100mg, 3 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

EG0889

GenBank Accession Number:

BC093698

GeneID (NCBI):

940

ENSEMBL Gene ID:

ENSG00000178562

UNIPROT ID:

P10747

Full Name:

CD28 molecule

Calculated MW:

220 aa, 25 kDa

Purification Method:

Protein A purification

CloneNo.:

240354D2

Recommended Dilutions:

Functional Assay: Assay Dependent

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

Applications

Tested Applications:

FC, Functional Assay

Species Specificity:

human, monkey, non-human primates

Positive Controls:

Functional Assay: Recombinant protein,

FC: human PBMCs,

Background Information

CD28 (T-cell-specific surface glycoprotein CD28), also known as T44 and Tp44, is a 44 kD disulfide-linked homodimeric type I glycoprotein (PMID: 2162180). It is a member of the immunoglobulin superfamily and is expressed on most T lineage cells, NK cell subsets, and plasma cells (PMID: 2162180, 8386518). CD28 may affect in vivo immune responses by functioning both as a cell adhesion molecule linking B and T lymphocytes and as the surface component of a novel signal transduction pathway (PMID: 2162180, 3021470). CD28 binds both CD80 and CD86 with a highly conserved motif MYPPY in the CDR3-like loop (PMID: 15696168, 7964482). CD28 is considered a major co-stimulatory molecule, inducing T lymphocyte activation and IL-2 synthesis, and preventing cell death (PMID: 1348520).

Storage

Storage:

Store at -80°C. Stable for one year after shipment.

Storage Buffer:

PBS only, low endotoxin, pH7.4

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

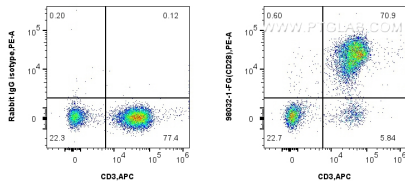
T: 4006900926

E: Proteintech-CN@ptglab.com

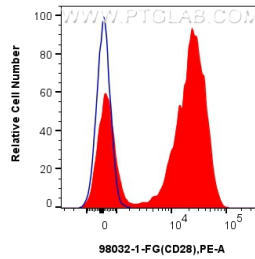
W: ptgcn.com

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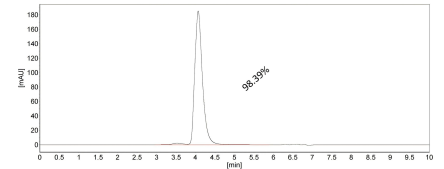
Selected Validation Data



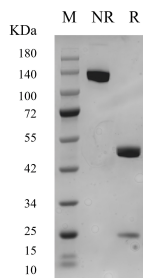
1x10⁶ human PBMCs were surface stained with 0.25 ug Anti-Human CD28 Rabbit RecAb (98032-1-FG, Clone: 240354D2) or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9), and PE-Conjugated Goat Anti-Rabbit IgG(H+L). Cells were then stained with APC Anti-Human CD3 (OKT3) Mouse IgG2a Recombinant Antibody (APC-65569, Clone: OKT3). Cells were not fixed. Lymphocytes were gated.



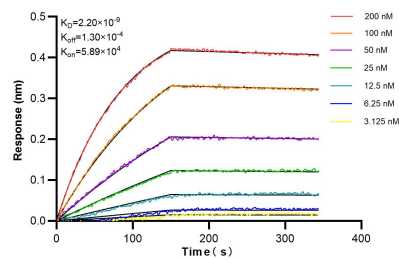
1x10⁶ human PBMCs were surface stained with 0.25 ug Anti-Human CD28 Rabbit RecAb (98032-1-FG, Clone: 240354D2) (red) or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue), and PE-Conjugated Goat Anti-Rabbit IgG(H+L). Cells were not fixed. Lymphocytes were gated.



The purity of Human CD28 Recombinant monoclonal antibody (Cat. No. 98032-1-FG) was greater than 95% as determined by SEC-HPLC.



Purity of Human CD28 Recombinant monoclonal antibody (Cat. No. 98032-1-FG) was determined by SDS-PAGE. The antibody was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



Biolayer interferometry (BLI) kinetic assays of 98032-1-FG against Human CD28 were performed. The affinity constant is 2.20 nM.