

For Research Use Only

LE/AF Purified Rabbit Anti-Human CD28 Antibody

Catalog Number: BK00001



Basic Information

Catalog Number:

BK00001

Size:

100mg, Concentration: 3 mg/ml by Nanodrop;

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

Positive Controls:

Functional Assay : human PBMCs,

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 2 - 8°C. Stable for one year after shipment.

Storage Buffer:

Sterile PBS, pH7.4

*** 20ul sizes contain 0.1% BSA

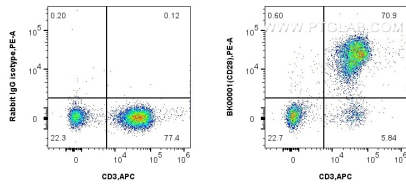
For technical support and original validation data for this product please contact:

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

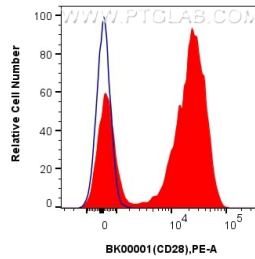
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

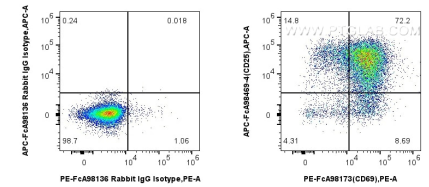
Selected Validation Data



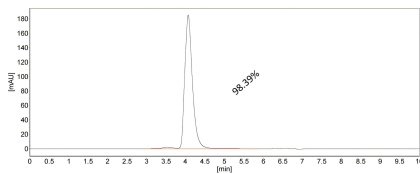
1x10⁶ human PBMCs were surface stained with 0.25 ug LE/AF Purified Rabbit Anti-Human CD28 Antibody (BK00001, Clone:240354D2) and PE-Conjugated Goat Anti-Rabbit IgG(H+L), and 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9). Cells were not fixed. Cells were then stained with APC Anti-Human CD3 (OKT3) Mouse IgG2a Recombinant Antibody (APC-65569, Clone: OKT3). Cells were not fixed. Lymphocytes



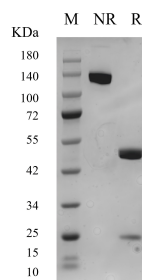
1x10⁶ human PBMCs were surface stained with 0.25 ug LE/AF Purified Rabbit Anti-Human CD28 Antibody (BK00001, Clone:240354D2) (red) and PE-Conjugated Goat Anti-Rabbit IgG(H+L), and 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were not fixed. Lymphocytes were gated.



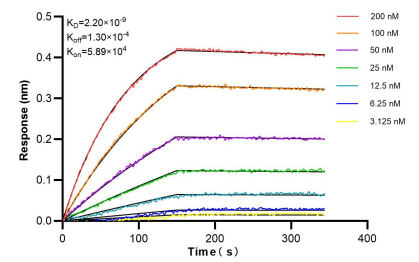
1x10⁶ untreated or anti-CD3 (BK00002, 2 ug/ml) and anti-CD28 (BK00001, 10 ug/ml) treated human PBMCs were surface stained with 5 ul FcZero-rAb® PE Anti-Human CD69 Rabbit Recombinant Antibody (PE-FcA98173, Clone: 241552F1) and 5 ul FcZero-rAb® APC Anti-Human CD25/IL-2RA Rabbit Recombinant Antibody (APC-FcA98469-4, Clone: 253320A1). Cells were not fixed.



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.



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