

For Research Use Only

Recombinant Human CD28 protein (hFc Tag)



Catalog Number: Eg0969

Basic Information

Species:
Human

EC50:
6-24 ng/mL

Purity:
>90 %, SDS-PAGE

Tag:
hFc Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Human CD28 protein Asn19-Pro152 (Accession# P10747-1) with a human IgG1 Fc tag at the C-terminus.

GeneID:
940

Accession:
P10747-1

Predicted Molecular Mass:
41.1 kDa

SDS-PAGE:
52-65 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human CD80 (Myc tag, His tag) at 2 μ g/mL (100 μ L/well) can bind Human CD28 (hFc tag) with a linear range of 6-24 ng/mL.

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Cluster of Differentiation 28 (CD28, also known as Tp44) is one of the proteins constitutively expressed on the surface of 80% of human T cells. CD28 is a highly glycosylated membrane protein, formed by two homodimer disulfide-linked peptides, which shares homology with the immunoglobulin superfamily. CD28 signals play a key role in many T cell processes including cytoskeletal remodeling, production of cytokines, survival, and differentiation. CD28 interactions with the B7 family of costimulatory ligands are essential for initiating antigen-specific T cell responses, upregulating cytokine expression and promoting T cell expansion and differentiation.

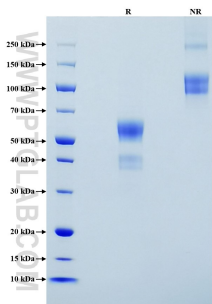
References

- 1.Hansen JA. et al. (1980). Immunogenetics. 10(1-4): 247-260.
- 2.Aruffo A. et al. (1987). Proc Natl Acad Sci U S A. 84(23): 8573-8577.
- 3.Jonathan H Esensten. et al. (2016). Immunity. 44(5):973-988.
- 4.D J Lenschow. et al. (1996). Annu Rev Immunol. 14:233-258.

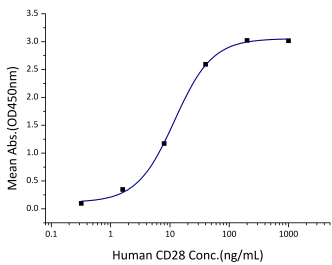
Synonyms

CD28, CD28 molecule, T-cell-specific surface glycoprotein CD28, Tp44

Selected Validation Data



Purity of Recombinant Human CD28 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



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