

For Research Use Only

Recombinant Human B7-2/CD86 protein (His Tag)



Catalog Number: Eg0966

Basic Information

ED50:
72-290 ng/mL

GeneID:
942

Species:
Human

Accession:
P42081

Purity:
>95 %, SDS-PAGE

Technical Specifications

Purity:
>95 %, SDS-PAGE

Endotoxin Level:
<1.0 EU/ μ g protein, LAL method

Source:
HEK293-derived Human B7-2 protein Leu26-Pro247 (Accession# P42081) with His tag at the C-terminus.

Predicted Molecular Mass:
26.2 kDa

SDS-PAGE:
37-60 kDa, reducing (R) conditions

Formulation:
Lyophilized from sterile PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Human B7-2 (His tag) at 2 μ g/mL (100 μ L/well) can bind Human CD28 (hFc tag) with a linear range of 72-290 ng/mL.

Storage and Shipping

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

- 12 months from the date of receipt, -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

CD86 (also known as B7-2) is a costimulatory molecule belonging to the immunoglobulin (Ig) superfamily. CD86 is primarily expressed in antigen-presenting cells (APCs), including B cells, dendritic cells, and macrophages. CD86 has strong structural similarity with another B7 family molecule, CD80(B7-1). CD86 and CD80 are the ligands for two proteins at the cell surface of T cells, CD28 antigen and cytotoxic T-lymphocyte antigen 4 (CTLA-4). The binding of CD86 or CD80 with CD28 antigen is a costimulatory signal for T cell activation, proliferation, and cytokine production. The binding of CD86 or CD80 with CTLA-4 negatively regulates T-cell activation and diminishes the immune response. However, CD86 and CD80 bind to CTLA-4 with higher affinity than CD28. Defects in CTLA-4-mediated transendocytosis of CD86 are associated with autoimmunity.

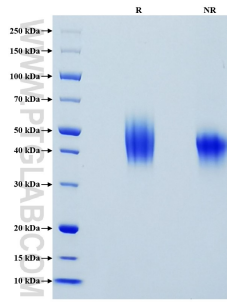
References

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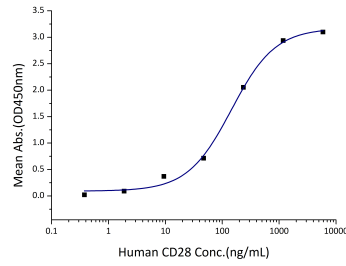
Synonyms

B70, B7-2, BU63, CD28LG2, CD86, LAB72, MGC34413

Selected Validation Data



Purity of Recombinant Human B7-2 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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For technical support and original validation data for this product please contact

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