For Research Use Only

Recombinant Mouse CD86 protein (His



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Catalog Number: Eg0802

Basic Information

Tag)

Species: Mouse EC50:

10-40 ng/mL

Purity: >95 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >95 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ μ g protein, LAL method

HEK293-derived Mouse CD86 protein Val24-Glu245 (Accession #P42082-1) with a His tag at the C-terminus.

12524

Accession:

P42082-1

Predicted Molecular Mass:

SDS-PAGE:

32-48 kDa, reducing (R) conditions

Formulation

Lyophilized from 0.22 $\,\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as

protectants before lyophilization.

Biological Activity

Immobilized Mouse CD86 (His tag) at 1 $\,\mu$ g/mL (100 $\,\mu$ L/well) can bind Mouse CTLA-4 (hFc tag) with a linear range of 10-40 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.

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 on 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). Binding of CD86 or CD80 with CD28 antigen is a costimulatory signal for T cell activation, proliferation, and cytokine production. 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.

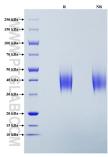
References

1.Bolandi N, et al. (2021). Int J Mol Sci. 22(19):10719 2.Yokozeki H, et al. (1996). J Invest Dermatol.106(1):147-153 3.Baravalle G, et al. (2011). J Immunol. 187(6):2966-2973. 4.Collins M, et al. (2005). Genome Biol. 6(6):223 5.Greaves P, et al. (2013). Blood. 121(5):734-744 6.Kennedy A, et al. (2022). Nat Immunol.23(9):1365-1378

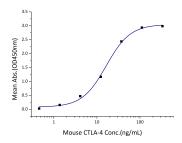
Synonyms

B7-2/CD86, Cd86, B7, B7 2, B7.2

Selected Validation Data



Purity of Recombinant Mouse CD86 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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