GenScript Make Research Easy

Rev04 Update: Mar,01,2022

DATASHEET

B7-2/CD86 Fc Chimera, Human

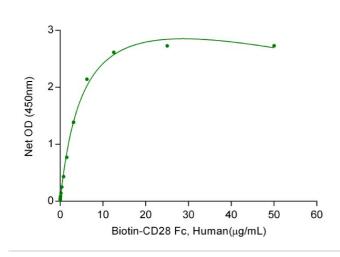
Cat. No.: Z03416

Product Introduction

Species	Human
Protein Construction	B7-2/CD86 (Leu20-Pro247) Accession # P42081hFcN-termC-term
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/µg of protein by gel clotting method
Biological Activity	Immobilized B7-2/CD86, hFc, Human at 5.0 μg/ml (100 μl/well) can bind human Biotin- CD28-Fc.
Expression System	HEK 293
Apparent Molecular Weight	65~80 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS, 5% trehalose and mannitol.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at 20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples





Immobilized B7-2/CD86-Fc at 5 μ g/mL (100 μ L/well) can bind human Biotin-CD28-Fc with a linear range of 0.09~3.12 μ g/mL.

Background

Target Background : B7-1 and B7-2 are homologous costimulatory ligands expressed on the surface of antigen presenting cells (APCs), both are type 1 transmembrane proteins with a membrane distal IgV and a membrane proximal IgC domain. They share ~25% sequence homology and interact with the same receptors, CD28 and CTLA-4.Binding of these molecules to the T cell costimulatory receptors, CD28 and CTLA-4, is essential for the activation and regulation of T cell immunity. T cell activation requires engagement of the T cell receptor (TCR) with the peptide–MHC complex presented on the cell surface of antigen presenting cells (APCs). In addition to this antigen-specific interaction, a second interaction involving costimulatory receptors (CD28, ICOS) on T cells and their respective ligands (B7-1/B7-2, ICOS-L) on APCs is required for optimal T cell activation. B7-1 and B7-2 may also function to deliver signal into dendritic cells. While B7-1 favors binding to CTLA-4, B7-2 shows a preference for CD28.

Synonyms : Activation B7-2 antigen; B70; B7-2 antigen; B72; B7-2; B-lymphocyte activation antigen B7-2; BU63; CD28 antigen ligand 2; CD86; B7-2; CD28LG2; LAB72; MGC34413

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.