

Rev04
 Update: Mar,01,2022

DATASHEET

B7-1(CD80) Fc Chimera, Human

Cat. No.: Z03409

Product Introduction

Species	Human
Protein Construction	
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	<p>Assay #1: Immobilized CTLA-4, hFc, Human (Cat.No.: Z03373) at 2.0 μg/ml (100 μl/well) can bind biotinylated B7-1/CD80, hFc, Human.</p> <p>Assay #2: Immobilized CD28, hFc, Human (Cat.No.: Z03413) at 2.0 μg/ml (100 μl/well) can bind biotinylated B7-1/CD80, hFc, Human.</p>
Expression System	HEK 293
Apparent Molecular Weight	75~80 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS.
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 μg/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.

Background

Target Background : B7-1/CD80 and B7-2/CD86, together with their receptors CD28 and CTLA-4, constitute one of the dominant co-stimulatory pathways that regulate T- and B-cell responses. Although both CTLA-4 and CD28 can bind to the same ligands, CTLA-4 binds to B7-1 and B7-2 with a 20-100 fold higher affinity than CD28 and is involved in the down-regulation of the immune response. Mature human B7-1 consists of a 208 amino acid extracellular domain (ECD) with two immunoglobulin-like domains, a 21 amino acid transmembrane domain, and a 25 amino acid cytoplasmic domain. Both human and mouse B7-1 and B7-2 can bind to either human or mouse CD28 and sCTLA-4. B7-1 is expressed on activated B cells, activated T cells, and macrophages. B7-2 is constitutively expressed on interdigitating dendritic cells, Langerhans cells, peripheral blood dendritic cells, memory B cells, and germinal center B cells.

Synonyms : CD80; B7; B7-1; B7.1; BB1; CD28LG; CD28LG1; LAB7

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