

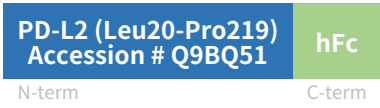
Rev04
Update: Mar,01,2022

DATASHEET

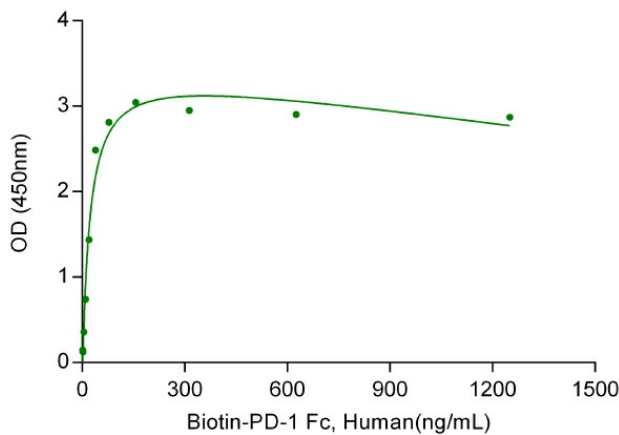
PD-L2 Fc Chimera, Human

Cat. No.: Z03417

Product Introduction

Species	Human
Protein Construction	 <p>PD-L2 (Leu20-Pro219) Accession # Q9BQ51</p> <p>N-term</p> <p>hFc</p> <p>C-term</p>
Purity	> 97% as analyzed by SDS-PAGE
Endotoxin Level	< 0.2 EU/μg of protein by gel clotting method
Biological Activity	Immobilized PD-L2, hFc, Human (Cat. No.: Z03417) at 5.0 μg/ml (100 μl/well) can bind Biotin-PD-1 Fc, Human when detected by Streptavidin-HRP.
Expression System	HEK 293
Apparent Molecular Weight	~75 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 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.

Examples



Immobilized PD-L2 Fc Chimera, Human at 5 µg/mL (100 µL/well) can bind Biotin-PD-1 Fc, Human with a linear range of 2.44-39.06 ng/mL.

Background

Target Background : PD-L1 and PD-L2 are ligands for PD-1, a costimulatory molecule that plays an inhibitory role in regulating T cell activation in the periphery. PD-L2 also known as PD-L2, B7-DC serves as a negative and a positive regulator of T cell function. The expression and function of PD-L2 are similar to PD-L1. Both PD-L2–PD-1 and PD-L1–PD-1 signals inhibit T cell proliferation by blocking cell cycle progression but not by increasing cell death. PD-L2–PD-1 interactions are able to inhibit TCR-mediated proliferation and cytokine production in the absence of CD28 costimulation. Threshold for T cell activation may be a balance between activating signals, such as those delivered by the engagement of CD28 by B7-1 and B7-2, and inhibitory signals, mediated by engagement of PD-1 by PD-L1 and PD-L2. The structural conservation of B7-like and CD28-like receptors may reflect the distance between T cells and APCs in the immunological synapse. The PD-L–PD-1 pathway may play a key role in the induction and/or maintenance of peripheral tolerance and autoimmune disease. Because PD-L1 and PD-L2 can inhibit effector T cell proliferation and cytokine production, the PD-L–PD-1 pathway may be an attractive therapeutic target. Blocking the PD-1 pathway may enhance anti-tumor immunity, whereas stimulating this pathway may be useful for down-regulating ongoing immune responses in transplant rejection and autoimmune and allergic diseases.

Synonyms : B7-DC; bA574F11.2; Btdc; Butyrophilin B7-DC; Butyrophilin-like Protein; CD273 antigen; CD273; CD273PD-1 ligand 2; MGC142240; PD-1-ligand 2; PDCD1L2; MGC142238; PDCD1LG2; PDL2; PD-L2

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