Recombinant Mouse B7-DC/PD-L2/CD273 Protein (Fc Tag)

Catalog Number: PKSM041290

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

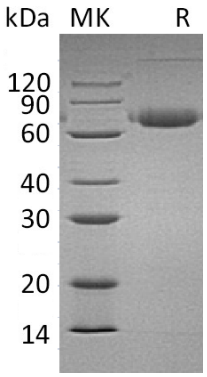
Description

Species	Mouse
Mol_Mass	49.7 kDa
Accession	Q9WUL5
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Background

Programmed cell death 1 ligand 2 (PD-L2), also known as butyrophilin B7-DC or PDCD1 ligand 2, belongs to the member of B7 family which can regulate the activation and tolerance of T cells. PD-L2 is one ligand for Programmed cell death 1(PD-1), and the other is PD-L1. These two ligands shares 34% aa sequence identity. Mouse PD-L2 gene encodes a 273 amino acids (aa) protein with a putative 19 aa signal peptide, a 201 aa extracellular region , a 21 aa transmembrane domain and a 32 aa cytoplasmic region. The mouse PD-L2 gene is highly expressed in heart, placenta, pancreas, lung and liver while expressed weakly in spleen, lymph nodes and thymus. Besides, the expression of PD-L2 gene can be induced on dendritic cells grown from peripheral blood mononuclear cells under CSF2 and IL4/interleukin-4 treatment, and up-regulated by IFNG/IFN-gamma stimulation in monocytes. PD-L2 usually functions in a PDCD1-independent manner and is involved in regulating costimulatory signal which is essential for T-cell proliferation and IFNG production. Recent studies demonstrate that the expression of PD-L2 on the tumor cells promotes CD8 T cell–mediated rejection of tumor cells, at both the induction and effector phase of antitumor immunity. Moreover, PD-L2 binds to PD-1 cells and enhances T cell killing in a PD-1–independent mechanism.

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