



Recombinant Protein Technical Manual

Recombinant Mouse B7-DC/PD-L2/CD273 Protein (Fc Tag) RPES0850

Product Data:

Product SKU: RPES0850

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q9WUL5

Protein Information:

Molecular Mass: 49.7 kDa

AP Molecular Mass: 70-80 kDa

Tag: C-Fc

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Programmed cell death 1 ligand 2;Pdc1lg2;PD ligand 2;PD-L2; PDCD1 ligand 2; B7-DC; CD273;Btdc;F730015O22Rik;PD-L2

Immunogen Information:

Sequence: Leu20-Arg219

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), 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 cells and enhances T cell killing in a PD-independent mechanism.