



Overview

Synonyms	PD-1; CD279; PDCD1; Programmed Death-1; PD-L1; B7-H1; CD274; PDCD1L1;
	PDCD1LG1; B7 Homolog 1,human pd-l1,pdl1,免疫检查点
Description	Programmed death-ligand 1 (PD-L1) also known as cluster of differentiation 274 (CD274) or B7 homolog 1 (B7-H1) is a protein that in humans is encoded by the CD274 gene. PD-L1((B7-H1)) is a 40kDa type 1 transmembrane protein that has been speculated to play a major role in suppressing the immune system during particular events such as pregnancy, tissue allografts, autoimmune disease and other disease states such as hepatitis. Normally the immune system reacts to foreign antigens where there is some accumulation in the lymph nodes or spleen which triggers a proliferation of antigen-specific CD8+ T cell. PD-L1(B7-H1) binds to its receptor, PD-1, found on activated T cells, B cells, and myeloid cells, to modulate activation or inhibition. PD-L1(B7-H1) expression is up-regulated in a small fraction of activated T and B cells and a much larger fraction of activated monocytes. PD-L1(B7-H1) expression is also induced in dendritic cells and keratinocytes after IFN-gamma stimulation. Interaction of B7-H1 with PD-1 results in inhibition of TCR-mediated proliferation and cytokine production. Recombinant Human PD-L1 produced in HEK293 cells is a polypeptide chain containing 227 amino acids with C-terminal 6×His. A fully biologically active molecule, rhPD-L1 has a molecular mass of 31-35 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.
Source	HEK293
Biological Activity	Immobilized PD-L1, His, Human at 2 µg/mL (100 µl/well) can bind PD-1 Fc Chimera, Human(Cat: Z03370) with a linear range of 24-390 ng/mL.
Sequence	Phe ¹⁹ -Thr ²³⁹ (Accession #: Q9NZQ7-1), expressed with a C-terminal 6xHis FTVTVPKDLYVVEYGSNMTIECKFPVEKQLDLAALIVYW EMEDKNIIQFVHGEEDLKVQHSSYRQRARLLKDQLSLGN AALQITDVKLQDAGVYRCMISYGGADYKRITVKVNAPYN KINQRILVVDPVTSEHELTCQAEGYPKAEVIWTSSDHQV LSGKTTTTNSKREEKLFNVTSTLRINTTTNEIFYCTFRR LDPEENHTAELVIPELPLAHPPNERTHHHHHH

Properties

Measured Molecular Weight	31-35 kDa, observed by reducing SDS-PAGE.
Purity	>95% as analyzed by reducing SDS-PAGE.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, 5% trehalose and mannitol.
Reconstitution	Reconstituted in ddH ₂ O or PBS at 100 μ g/ml.
Endotoxin Level	< 0.2 EU/µg, determined by LAL method.
Storage	Lyophilized recombinant PD-L1 remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human PD-L1 should be stable 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.

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