

PD-L1 Protein, Canine (HEK293, Fc)

Cat. No.:	HY-P73717
Synonyms:	Programmed cell death 1 ligand 1; PD-L1; B7-H1; CD274; PDL1
Species:	Canine
Source:	HEK293
Accession:	NP_001278901 (F19-R236)
Gene ID:	484186
Molecular Weight:	Approximately 70-80&140-160 kDa due to the glycosylation

PROPERTIES

AA Sequence	<p> FTITVSKDL Y VVEYGGNVTM ECKFPVEKQL NLFALIVYWE MEDKKIIQFV NGKEDLKVQH SSYSQRAQLL KDQLFLGKAA LQITDVR LQD AGVYCCLIGY GGADYKRITL KVHAPYRNIS QRISVDPVTS EHELMCQAE G YPEAEVIWTS SDHRVLSGKT TITNSNREEK LFNVTSTLNI NATANEIFYC TFQRS GP EEN NTAELVIPER LPVPASER </p>
Biological Activity	Measured by its binding ability in a functional ELISA. When Recombinant Canine PD-1 is present at 0.5 µg/mL, can bind Recombinant Canine PD-L1. The ED ₅₀ for this effect is 4.116 µg/mL.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	PD-L1 is the third member of the B7 family that does not bind CD28, cytotoxic T-lymphocyte A4 or inducible co-stimulator, and has 10-25% homology with B7.1 and B7.2 proteins. PD-L1 is encoded by the PDCDL1 gene, which was discovered at p24.1 on human chromosome 9 ^[1] .
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The most important role of PD-L1 is binding with programmed death-1 (PD-1; CD279), a type I transmembrane receptor that is 288 amino acids long and was first found on T cells. The engagement of PD-L1 and PD-1 on cancer cells activates Src homology region 2 domain-containing phosphatases, which inhibit the T cell receptor (TCR) pathway. Inhibition of the TCR pathway leads to inhibition of T cell activities, including proliferation, survival and cytokine production, such as that of IL-2, tumour necrosis factor α (TNF- α) and interferon γ (IFN- γ), as well as the inhibition of B7-1 and T cell tolerance^[1].

Caution: Product has not been fully validated for medical applications. For research use only.

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