

PD-L1 Protein, Rat (221a.a, HEK293, His)

Cat. No.:	HY-P70814
Synonyms:	B7-H; B7H1; B7-H1; B7H1PDCD1L1; CD274 antigenMGC142294; CD274 molecule; CD274; PDCD1L1; PDCD1LG1; PDL1; PD-L1; PD-L1B7 homolog 1; PDL1PDCD1 ligand 1; programmed cell death 1 ligand 1; Programmed death ligand 1
Species:	Rat
Source:	HEK293
Accession:	D4AE25 (A18-T238)
Gene ID:	499342
Molecular Weight:	40-60 kDa

PROPERTIES

AA Sequence	<pre>A F T I T A P K D L Y V V E Y G S N V T M E C R F P V E Q K L D L L A L V V Y W E K E D K E V I Q F V E G E E D L K P Q H S S F R G R A F L P K D Q L L K G N A V L Q I T D V K L Q D A G V Y C C M I S Y G G A D Y K R I T L K V N A P Y R K I N Q R I S M D P A T S E H E L M C Q A E G Y P E A E V I W T N S D H Q S L S G E T T V T T S Q T E E K L L N V T S V L R V N A T A N D V F H C T F W R V H S G E N H T A E L I I P E L P V P R L P H N R T</pre>
Biological Activity	Measured by its binding ability in a functional ELISA. When Recombinant Rat PD-1 is present at 1 µg/mL, can bind Recombinant Rat PD-L1. The ED ₅₀ for this effect is 0.526 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 (CD274) is a type I transmembrane protein that belongs to the immunoglobulin (Ig) superfamily. PD-1 can interact with its ligands PD-L1 or PD-L2. PD-1/PD-L1 axis is responsible for T cell activation, proliferation, and cytotoxic secretion in cancer, and regulates anti-tumor immune responses ^[1] . In addition, PD-L1 can also interact with CD80, which may deliver
------------	--

inhibitory signals to activated T cells. In the absence of PD-1 signaling in T cells, PD-L1 is also able to protect tumor cells from the cytotoxic effects of type I and type II interferons and from cytotoxic T lymphocyte (CTL)-mediated cytolysis^[2]. PD-L1 can promote differentiation and maintain the function of induced T reg (iT reg) cells by sustaining and enhancing Foxp3 expression in iT reg cells. PD-L1 induces iT reg cells by inhibiting the Akt/mTOR signaling cascade^[3]. PD-L1 is often expressed by macrophages, some activated T cells and B cells, DCs and some epithelial cells, especially under inflammatory conditions. Noticeably, PD-L1 is expressed by tumor cells as an “adaptive immune mechanism” to escape anti-tumor responses. Therefore, PD-L1 acts as a pro-tumorigenic factor in cancer cells via binding to its receptors^[1].

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA