PD-L1 Protein, Cynomolgus/Rhesus Macaque (HEK293, His)

Cat. No.:	HY-P77347
Synonyms:	Programmed cell death 1 ligand 1; PD-L1; B7-H1; CD274; PDL1
Species:	Rhesus Macaque
Source:	HEK293
Accession:	XP_015292694 (M1-T239)
Gene ID:	102145573
Molecular Weight:	Approximately 37.7 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
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 Protein assumes a critical role in both the induction and maintenance of immune tolerance to self, acting as a ligand for the inhibitory receptor PDCD1/PD-1 and thereby modulating the activation threshold of T-cells, ultimately limiting their effector response. Additionally, PD-L1 may function as a costimulatory molecule for T-cell subsets that predominantly produce interleukin-10 (IL10) through an as yet unidentified activating receptor. Beyond its role as an immune checkpoint, PD-L1 also acts as a transcription coactivator, translocating into the nucleus in response to hypoxia and interacting with phosphorylated STAT3 to promote the transcription of GSDMC, leading to pyroptosis. Exploited by tumors to attenuate anti-tumor immunity and escape immune system destruction, the PDCD1-mediated inhibitory pathway facilitated by PD-L1 interaction with PDCD1/PD-1 inhibits cytotoxic T lymphocytes (CTLs) effector function. Blocking the PDCD1-mediated pathway has shown promise in reversing exhausted T-cell phenotypes and normalizing anti-tumor responses, providing a rationale for cancer immunotherapy.

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