

PD-1 Protein, Cynomolgus (147a.a, HEK293, His)

Cat. No.:	HY-P70676
Synonyms:	Programmed cell death 1; PD-1; PD1
Species:	Cynomolgus
Source:	HEK293
Accession:	B0LAJ3 (P21-Q167)
Gene ID:	102123659
Molecular Weight:	30-50 kDa

PROPERTIES

AA Sequence	<p>P G W F L E S P D R P W N A P T F S P A L L L V T E G D N A T F T C S F S N A S</p> <p>E S F V L N W Y R M S P S N Q T D K L A A F P E D R S Q P G Q D C R F R V T R L</p> <p>P N G R D F H M S V V R A R R N D S G T Y L C G A I S L A P K A Q I K E S L R A</p> <p>E L R V T E R R A E V P T A H P S P S P R P A G Q F Q</p>
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	<p>PD-1 is a protein encoded by the PDCD1 gene in the human body. PD-1 is a cell surface receptor on T cells and B cells, which regulates the immune system's response to human cells by inhibiting the inflammatory activity of T cells, downregulating the immune system and promoting self-tolerance. PD-1 is an immune checkpoint that protects autoimmunity by promoting apoptosis of antigen-specific T cells in lymph nodes (programmed cell death) and reducing apoptosis of regulatory T cells (anti-inflammatory, inhibitory T cells). PD-1 can bind to two ligands, PD-L1 and PD-L2. The expression of PD-L1 on tumor cells inhibits anti-tumor activity through the binding of PD-1 to effector T cells. PD-1 knockout mice showed lupus-like glomerulonephritis and dilated cardiomyopathy in the C57BL/6 and BALB/c gene backgrounds, respectively. In the mouse thymus, the gene was induced to express in the thymus when anti-CD3 antibodies were injected and a large number of</p>
------------	---

thymocytes underwent apoptosis. Mice bred in the BALB/c context lacking the gene developed dilated cardiomyopathy and died of congestive heart failure^{[1][2][3][4][5]}.

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