For Research Use Only

Recombinant Mouse PD-1 protein (His Tag)



www.ptgcn.com

Catalog Number: Eg0918

Basic Information

Species: Mouse

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Mouse PD-1 protein Leu25-Gln167 (Accession# Q02242) with a His tag at the C-terminus.

GeneID: 18566

002242

Predicted Molecular Mass:

17.2 kDa **SDS-PAGE:**

35-45 kDa, reducing (R) conditions

Lyophilized from 0.22 $\,\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Programmed cell death 1 (PD-1, also known as CD279) is an immunoinhibitory receptor that belongs to the CD28/CTLA-4 subfamily of the Ig superfamily. It is a 288 amino acids type I transmembrane protein composed of a Ig superfamily domain, a stalk, a transmembrane domain, and an intracellular domain containing an immunoreceptor tyrosine-based inhibitory motif (ITIM), as well as an immunoreceptor tyrosine-based switch motif (ITSM). PD-1 can be expressed on activated T cells, B cells, natural killer T cells, monocytes, and dendritic cells (DCs). Engagement of PD-1 by its ligands PD-L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function. It is critical for the regulation of T cell function during tolerance, autoimmunity and infection. Blockade of PD-1 can overcome immune resistance and also has been shown to have antitumor activity.

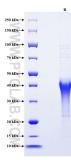
References

- Arlene H Sharpe, et al. (2007) Nat Immunol. 8(3):239-45.
 Mary E Keir, et al. (2008) Annu Rev Immunol. 26:677-704.
 James L Riley. (2009) Immunol Rev. 229(1):114-25.
 Loise M Francisco, et al. (2010) Immunol Rev. 236:219-42.
 Suzanne L Topalian, et al. (2012) N Engl J Med. 366(26):2443-54.

Synonyms

CD279, PD1, PD 1, Pdc1, Pdcd1

Selected Validation Data



Purity of Recombinant Mouse PD-1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.