For Research Use Only

Recombinant Human PD-L1/CD274 protein (His Tag)



Catalog Number: Eg1114

Basic Information

Species: Human

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 Human PD-L1 protein Phe19-Arg238 (Accession# Q9NZQ7-1) with a His tag at the C-terminus.

GeneID: 29126

Q9NZQ7-1

Predicted Molecular Mass: 26 kDa

SDS-PAGE:

30-36 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

PD-L1 (programmed cell death ligand 1, also known as CD274 or B7-H1) is a 290 aa type I transmembrane PD-L1 (programmed cell death ligand 1, also known as CD274 or B7-H1) is a 290 as type I transmembrane protein. PD-L1 is expressed constitutively on T cells, B cells, DCs, macrophages, mesenchymal stem cells and cultured bone marrow-derived mast cells. In addition, PD-L1 is also expressed on many nonhematopoietic cell types, including vascular endothelial cells, epithelial cells, muscle cells, hepatocytes, pancreatic islet cells, astrocytes in the brain, placental syncytiotrophoblasts, and cells in cornea, iris-ciliary body and retina of eye. PD-L1 is frequently upregulated in a wide variety of solid tumors, including melanoma, ovarian, lung, glioblastoma, breast, and pancreatic cancers. PD-L1 and PD-L2 are two ligands of PD-1. Engagement of PD-1 by 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. Besides the membrane-bound form, PD-L1 can also exist as a soluble form (sPD-L1) generated either by proteolytic cleavage of membrane-bound form or bytranslation of alternative spliced mRNA proteolytic cleavage of membrane-bound form or by translation of alternative spliced mRNA.

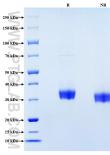
References

- 1. Arlene H Sharpe, et al. (2007) Nat Immunol. 8(3):239-45. 2. Mary E Keir, et al. (2008) Annu Rev Immunol. 26:677-704.
- 3. James L Riley. (2009) Immunol Rev. 229(1):114-25
- 4. Masahiro Takeuchi, et al. (2018) Immunol Lett. 196:155-160.

Synonyms

CD274, PD-L1, B7 H1, B7-H1, hPD-L1

Selected Validation Data



Purity of Recombinant Human PD-L1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.