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Produktinformation



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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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PRODUCT INFORMATION



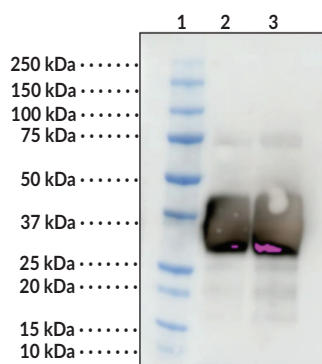
PD-L1 Extracellular Domain (human, recombinant) - Biotinylated Item No. 36952

Overview and Properties

Synonyms: B7 Homolog 1, B7-H1, CD274, hPD-L1, PDCD1 Ligand 1, Programmed Cell Death 1 Ligand 1, Programmed Cell Death Protein Ligand 1
Source: Recombinant human C-terminal AVI-tagged PD-L1 expressed in HEK293 cells
Amino Acids: 19-239
Molecular Weight: 27.1 kDa
Storage: -80°C (as supplied)
Stability: ≥6 months
Purity: ≥90% estimated by SDS-PAGE
Supplied in: 50 mM Tris hydrochloride, pH 8.0, with 100 mM sodium chloride
Concentration: *batch specific* mg/ml

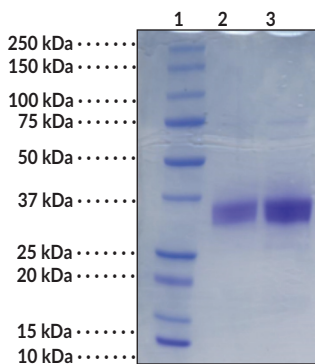
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



Lane 1: MW Markers
Lane 2: 2 µg
Lane 3: 4 µg

Chemiluminescent blot with 1:10,000 v:v Streptavidin:HRP (Item No. 16747).



Lane 1: MW Markers
Lane 2: 2 µg Clean pool
Lane 3: 4 µg Clean pool

4-20% purity gel of clean and dirty pools stained with Coomassie blue. Clean pool >90%.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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PRODUCT INFORMATION



Description

Programmed cell death 1 ligand 1 (PD-L1), also known as B7-H1 or CD274, is a B7 family protein that is involved in regulation and attenuation of the adaptive immune response and peripheral T cell tolerance.¹⁻⁴ It is a 290-amino acid type I transmembrane protein encoded by *CD274* in humans and is composed of a 239-amino acid extracellular domain consisting of a signal peptide, an IgV-like domain, and an IgC-like domain, a transmembrane domain, and a cytoplasmic tail.^{1,5} PD-L1 is constitutively expressed in T and B cells, dendritic cells, macrophages, and regulatory T cells (Tregs), as well as a variety of nonhematopoietic cells, and is upregulated by IFN- γ .³ Binding of PD-L1 to its receptor, programmed cell death protein 1 (PD-1), suppresses T cell proliferation, migration, and cytokine production.^{2,4} PD-L1 is also aberrantly expressed in a variety of tumor cells, and expression of PD-L1 in tumor tissue is associated with poor prognosis in patients with renal cell carcinoma.^{6,7,8} Formulations containing PD-L1 blocking antibodies have been used in the treatment of a variety of cancers. Cayman's PD-L1 Extracellular Domain (human, recombinant) - Biotinylated protein contains purified PD-L1 that has been biotinylated *via* the *E. coli* biotin ligase enzyme BirA, which was subsequently depleted by affinity chromatography. It consists of 253 amino acids including the purification tag, has a calculated molecular weight of 27.1 kDa, and a predicted N-terminus of Phe19 after signal peptide cleavage. By SDS-PAGE, under reducing conditions, the apparent molecular mass of the protein is 35 kDa due to post-translational modifications.

References

1. Fabrizio, F.P., Trombetta, D., Rossi, A., *et al.* Gene code CD274/PD-L1: From molecular basis toward cancer immunotherapy. *Ther. Adv. Med. Oncol.* **10**, (2018).
2. Riley, J.L. PD-1 signaling in primary T cells. *Immunol. Rev.* **229**(1), 114-125 (2009).
3. del Rio, M.L., Buhler, L., Gibbons, C.E., *et al.* PD-1/PD-L1, PD-1/PD-L2, and other co-inhibitory signaling pathways in transplantation. *Transpl. Int.* **21**(11), 1015-1028 (2008).
4. Akinleye, A. and Rasool, Z. Immune checkpoint inhibitors of PD-L1 as cancer therapeutics. *J. Hematol. Oncol.* **12**(1), 92 (2019).
5. Keir, M.E., Butte, M.J., Freeman, G.J., *et al.* PD-1 and its ligands in tolerance and immunity. *Annu. Rev. Immunol.* **26**, 677-704 (2008).
6. Ji, M., Liu, Y., Li, Q., *et al.* PD-1/PD-L1 pathway in non-small-cell lung cancer and its relation with EGFR mutation. *J. Transl. Med.* **13**, 5 (2015).
7. Thompson, R.H., Dong, H., Lohse, C.M., *et al.* PD-1 is expressed by tumor-infiltrating immune cells and is associated with poor outcome for patients with renal cell carcinoma. *Clin. Cancer Res.* **13**(6), 1757-1761 (2007).
8. Thompson, R.H., Kuntz, S.M., Leibovich, B.C., *et al.* Tumor B7-H1 is associated with poor prognosis in renal cell carcinoma patients with long-term follow-up. *Cancer Res.* **66**(7), 3381-3385 (2006).