Data Sheet (Cat.No.TMPY-07244)

TargetMol

PD-L1 Protein, Canine, Recombinant (His)

General Information

Protein Construction:	A DNA sequence encoding the Canine CD274 (NP_001278901.1) (Met1-Arg236) was expressed with a polyhistidine tag at the C-terminus.
Species:	Canine
Expression Host:	HEK293 Cells
Accession:	NP_001278901.1
Molecular Weight:	26.18 kDa (predicted); 48.1 kDa and 41.7 kDa (reducing contition, due to glycosylation)

QC Testing

Biological Activity:	1. Immobilized Recombinant Canine PD-L1/B7-H1 Protein (ECD, His Tag) at 2 μg/mL (100 μL/well) can bind Recombinant Canine PD1/PDCD1/CD279 Protein (Fc Tag), the EC50 is 500-1400 ng/mL. 2. Loaded Recombinant Canine PD-L1/B7-H1 Protein, His Tag on NTA Biosensor, can bind Recombinant Canine PD-1 Protein, hFc Tag with an affinity constant of 44.1 nM as determined in BLI assay (Sartorius Octet RED384) (QC tested).
Purity:	≥ 90% as determined by SDS-PAGE. ≥ 95% as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from sterile PBS, pH 7.4. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hardcopy of datasheet or the lot-specific COA.

Preparation and Storage

Reconstitution:

Please refer to the lot-specific COA.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Programmed death-1 ligand-1 (PD-L1, CD274, B7-H1) has been identified as the ligand for the immunoinhibitory receptor programmed death-1(PD1/PDCD1) and has been demonstrated to play a role in the regulation of

immune responses and peripheral tolerance. PD-L1/B7-H1 is a member of the growing B7 family of immune molecules and this protein contains one V-like and one C-like Ig domain within the extracellular domain, and together with PD-L2, are two ligands for PD1 which belongs to the CD28/CTLA4 family expressed on activated lymphoid cells. By binding to PD1 on activated T-cells and B-cells, PD-L1 may inhibit ongoing T-cell responses by inducing apoptosis and arresting cell-cycle progression. Accordingly, it leads to growth of immunogenic tumor growth by increasing apoptosis of antigen specific T cells and may contribute to immune evasion by cancers. PD-L1 thus is regarded as promising therapeutic target for human autoimmune disease and malignant cancers. Cancer ImmunotherapyCo-inhibitory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint Blockade: Blocking AntibodiImmune Checkpoint Blockade: PD-L1 / B7-H1 / CImmune Checkpoint Detection: AntibodiesImmune Checkpoint Detection: ELISA AntibodiesImmune Checkpoint Detection: FCM AntibodiesImmune Checkpoint Detection: ICC AntibodiesImmune Checkpoint Detection: IHC AntibodiesImmune Checkpoint Detection: WB AntibodiesImmune Checkpoint ProteinsImmune Checkpoint TargetsImmunotherapyPD-L1 / B7-H1 / CD274 Immune Checkpoint ProteTargeted Therapy

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