

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived		
	Cynomolgus Monkey PD-L2/B7-DC (Leu20-Pro219) Accession # XP_005581839	IEGRMD	Human IgG ₁ (Pro100-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Leu20		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	49 kDa		

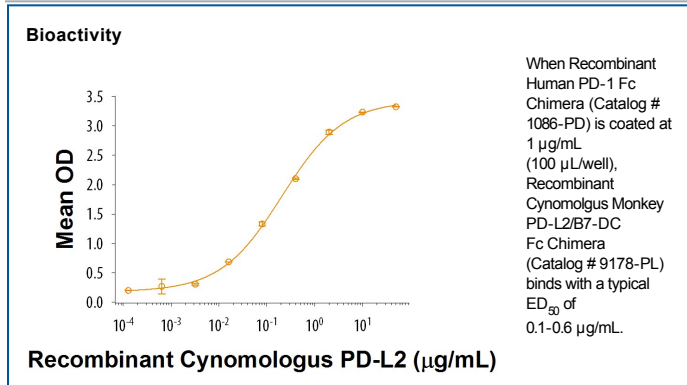
SPECIFICATIONS

SDS-PAGE	62-77 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human PD-1 Fc Chimera (Catalog # 1086-PD) is immobilized at 1 µg/mL, 100 µL/well, the concentration of Recombinant Cynomolgus Monkey PD-L2/B7-DC Fc Chimera that produces 50% of the optimal binding response is approximately 0.1-0.6 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in PBS.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

Programmed Death Ligand 2 (PD-L2), also known as B7-DC and butyrophilin-like protein, is a transmembrane member of the B7 family of proteins that provide signals for regulating T-cell activation and tolerance (1). Within the ECD, cynomolgous PD-L2 shares 71% and 96% aa sequence identity with mouse and human PD-L2, respectively (2, 3). PD-L2 is expressed on dendritic cells, subsets of activated CD4⁺ and CD8⁺ T cells, and memory B cells that differentiate into plasma cells (3-5). At inflammatory sites such as rheumatoid arthritis, allergen exposure, and virus infection, PD-L2 is up-regulated on synoviocytes, infiltrating macrophages, dendritic cells, and airway epithelial cells (6-10). PD-L2, along with B7-H1/PD-L1, binds to T cell PD-1 where it promotes IFN- γ production and CD40 Ligand up-regulation while inhibiting IL-4 production (2, 3, 11, 12). In addition, PD-L2 binds to RGM-B on macrophages and alveolar epithelial cells, supporting respiratory immune tolerance (13). In asthma, PD-L2 suppresses IL-5 and IL-13 production, promotes IL-12 production by dendritic cells, and supports allergen-induced airway hyper-responsiveness and mucus production (8, 10).

References:

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