

Product Information

Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated

Product Information

Catalog#	MK0930H
Product Name	Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated
Product Overview	Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated is expressed from human 293 cells (HEK293). It contains AA Phe 19 - Arg 238 (Accession # NP_054862.1). Predicted N-terminus: Phe 19. This protein carries a human IgG1 Fc fragment at the C-terminus, followed by a polyhistidine tag. The Avi tag is inserted in-between the Fc and his tags. The protein has a calculated MW of 53.2 kDa. The protein migrates as 66-75 kDa on a SDS-PAGE gel under reducing (R) condition due to glycosylation. The biotin to protein ratio is 0.5-1 as determined by the HABA assay.
Source	HEK293
Species	Human
Tag	His & Fc & Avi
Formulation	Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 10 mM NaCl, pH7.5. Normally trehalose is added as protectant before lyophilization.
Bio-activity	Immobilized Human PD-1, Fc Tag at 2 µg/mL (100µL/well) can bind Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated with a linear range of 0.01-0.25 µg/mL (QC tested). Immobilized Human B7-1, mouse IgG2a Fc Tag, low endotoxin at 5 µg/mL (100 µL/well) can bind Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated with a linear range of 0.02-0.625 µg/mL (Routinely tested). Flow Cytometry assay shows that recombinant Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated can bind to 293 cell overexpressing human PD-1. The concentration of PD-L1 used is 1 µg/ml (Routinely tested). FACS analysis shows that the binding of Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated to 293 overexpressing PD-1 was inhibited by increasing concentration of neutralizing anti-PD-1 antibody. The concentration of PD-L1 used is 2µg/ml. The IC50 is 0.64 µg/ml (Routinely tested). Immobilized cell surface PD-1(5x10 ⁴ of cells per well) can bind Recombinant Human CD274 Protein, His & Fc & Avi-tagged, Biotinylated with an EC50 of 0.082ug/ml (Routinely tested).
Protein length	Phe 19 - Arg 238
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4 centigrade before opening to recover the entire contents.

Molecular Mass	53.2 kDa
Stability	No activity loss is observed after storage at: 4-8 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Endotoxin	Less than 1.0 EU per µg by the LAL method.
