

## Active Recombinant Human PDCD1, His tagged

Cat. No. PDCD1-822H    Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human PDCD1 extracellular domain (Met 1-Gln 167) (NP_005009.2), fused with a C-terminal polyhistidine tag, was produced in Human Cell.
<b>Species</b>	Human
<b>Source</b>	HEK293
<b>ProteinLength</b>	Met 1-Gln 167
<b>Form</b>	Lyophilized from sterile 50mM MOPS, 500mM NaCl, pH 7.0
<b>Bio-activity</b>	<ol style="list-style-type: none"> <li>1. Immobilized human PD-1 at 2 µg/ml (100 µl/well) can bind PD-L1 Protein, Human, Recombinant (ECD, hFc Tag), the EC50 of human B7-H1 is 150-600 ng/mL.</li> <li>2. Immobilized human PD-1 at 2 µg/mL (100 µL/well) can bind Anti-PD1(MDX)-IgG4 Antibody (Nivolumab), the EC50 is 8-60 ng/mL.</li> <li>3. Labeled biotin to PD-1 Protein, Human, Recombinant (His Tag) by a certain molar ratio; Using the Octet RED System, the affinity constant (Kd) of PD-1 Protein, Human, Recombinant (His Tag), Biotinylated bound to Keytruda was 0.1 nM.</li> <li>4. Captured Anti-PD1 Mab (Human IgG4) on proA Chip can bind PD1 with an affinity constant of 10.03nM as determined in a SPR assay (Biacore T200).</li> <li>5. Captured Anti-PD-L1 Mab (Human IgG1) on proA Chip can bind PD-L1 with an affinity constant of 1.381nM as determined in a SPR assay (Biacore T200).</li> </ol>
<b>Molecular Mass</b>	The recombinant mature human PD1 consists of 154 amino acids and has a calculated molecular mass of 17.4 kDa. As a result of glycosylation, human PD1

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	migrates as an approximately 41.1 kDa protein in SDS-PAGE under reducing conditions.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method
<b>Purity</b>	> 95 % as determined by SDS-PAGE. > 90 % as determined by SEC-HPLC.
<b>Storage</b>	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4°C before opening to recover the entire contents.

## GENE INFORMATION

<b>Gene Name</b>	PDCD1 programmed cell death 1 [ Homo sapiens ]
<b>Official Symbol</b>	PDCD1
<b>Synonyms</b>	PDCD1; programmed cell death 1; programmed cell death protein 1; CD279; PD1; protein PD-1; PD-1; SLEB2; hPD-1; hPD-I;
<b>Gene ID</b>	5133
<b>mRNA Refseq</b>	NM_005018
<b>Protein Refseq</b>	NP_005009
<b>MIM</b>	600244

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