

# Recombinant Human PD-1

Catalog No: CM81

<b>Description</b>	Recombinant Human Programmed Cell Death Protein 1 is produced by our Mammalian expression system and the target gene encoding Leu25-Gln167 is expressed with a Fc tag at the C-terminus.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Programmed cell death protein 1; PDCD1; PD-1; hPD-1; CD279
<b>Accession No.</b>	Q15116
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Quality Control</b>	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Amino Acid Sequence</b>	LDSPDRPWNPTTFSPALLVTEGDNATFTCSFSNTSESFVLNWYRMSPSNQTDKLAAFPEDRSQPGQ DCRFRVTQLPNGRDFHMSVVRARRNDSGTLYLCAISLAPKAQIKESLRAELRVTERRAEVPTAHPSPS PRPAGQFQVDDIEGRMDEPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV SHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEK TISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTTPVLDSDG SFFLYSKLTVDKSRWQQGNVFCFSVMHEALHNHYTQKSLSLSPGK
<b>Background</b>	Programmed cell death protein 1(PDCD1) is a single-pass type I membrane protein and contains 1 Ig-like V- type domain. PD-1 is a member of the extended CD28/CTLA-4 family of T cell regulators. PDCD1 inhibits the T- cell proliferation and production of related cytokines including IL-1, IL-4, IL-10 and IFN- γ by suppressing the activation and transduction of PI3K/AKT pathway. In addition, coligation of PDCD1 inhibits BCR-mediating signal by dephosphorylating key signal transducer. PDCD1 has been suggested to be involved in lymphocyte clonal selection and peripheral tolerance, and thus contributes to the prevention of autoimmune diseases. As a cell surface molecule, PDCD1 regulates the adaptive immune response. Engagement of PD-1 by its ligands PD- L1 or PD-L2 transduces a signal that inhibits T-cell proliferation, cytokine production, and cytolytic function.

## SDS-Page

