

PD-1 (human), (recombinant)

PD-1 (programmed cell death-1) is a transmembrane protein important for regulating immune responses. It is a member of the CD28/CTLA-4 family of immunoreceptors and is expressed on T cells and pro-B cells suggesting it has a broad spectrum of immune regulation. PD-1 along with its two ligands, PD-L1 and PD-L2, prevent the activation of T cells and protect tissues from autoimmune attack. PD-1 and its ligands are also involved in reduction of infectious immunity, as well as tumor immunity. PD-1 has been shown to facilitate chronic infection and tumor progression. Drugs targeting PD-1 have shown promise in treating cancer and HIV and may be important in a variety of immune related disorders.

Citations: 1

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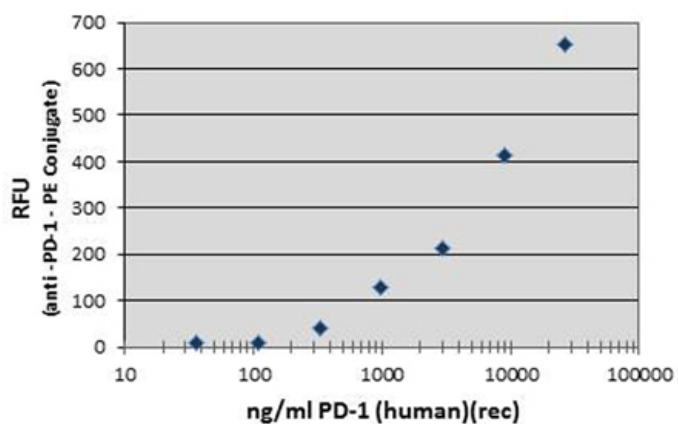
Ordering Information

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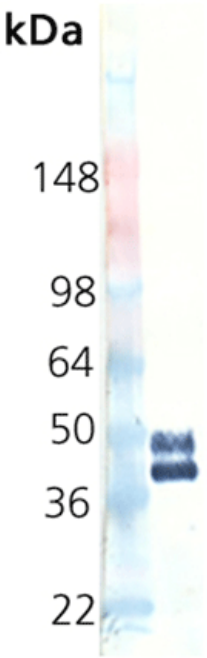
ENZ-PRT190-0050	50µg
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Manuals, SDS & CofA

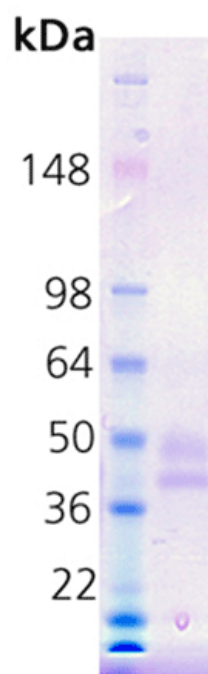
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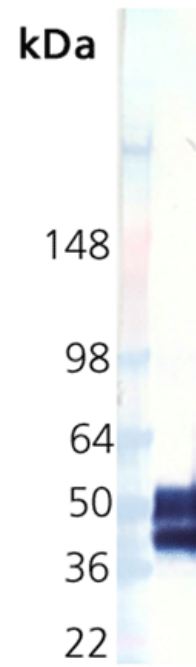
PD-1 Activity. PD-1 activity is in the range of 100 – 25,000 ng/ml. This was done by measuring PD-1's ability to bind to human PD-L1 (B7-H1) that was immobilized onto magnetic beads. Briefly, PD-1 was titered into the assay, which contained PD-L1 coated magnetic beads and goat anti – human PD-1 conjugated to phycoerythrin (PE). The reactions were incubated for 1 hour at room temperature, washed 3X with PBS, and resuspended in PBS. Each reaction was analyzed by measuring median PE intensity on a BD FACS Calibur cytometer.



Western Blot Analysis. Lane 1, Molecular weight marker. Lane 2, 100ng PD-1. Probed with mouse anti-PD-1 monoclonal antibody.



Coomassie stained SDS-PAGE. Lane 1, Molecular weight marker. Lane 2, 1.0 μ g PD-1.



Western Blot Analysis. Lane 1, Molecular weight marker. Lane 2, 100ng PD-1. Probed with rabbit anti-FLAG polyclonal antibody.

Handling & Storage

Handling	Avoid freeze/thaw cycles. After reconstitution, prepare aliquots and store at -80°C.
Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Programmed cell death-1, CD279, Programmed death receptor 1
Biological Activity	Binds to PD-L1.
Endotoxin Content	<100 EU/mg
Formulation	Lyophilized. Contains PBS.
MW	~20.5kDa (actual is a doublet at 40kDa and 50kDa that is immunoactive with PD-1)
Purity	≥90% (SDS-PAGE)
Source	Produced in HEK cells. Extracellular domain of PD-1 (aa 25-167) containing a 5'-His-tag, V5 epitope tag spacer, and a FLAG-tag.
Technical Info / Product Notes	FLAG is a registered trademark of Sigma-Aldrich Co.
UniProt ID	Q15116

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