

Crystal Structure of the PD-1/PD-L1 complex.  
Image courtesy of [www.rcsb.org](http://www.rcsb.org);  
DOI: 10.1073/pnas.0712278105.

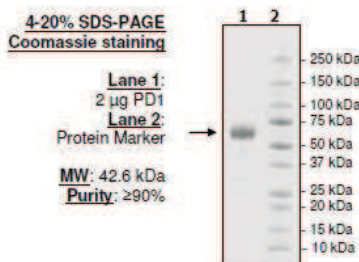
## PD-1 Pathway

The binding of Programmed Cell Death Protein 1 (PD-1), a receptor expressed on activated T-cells, to its ligands, PD-L1 and PD-L2, negatively regulates immune responses. The PD-1 ligands are found on most cancers, and PD-1/PD-L interaction inhibits T cell activity and allows cancer cells to escape immune surveillance. The PD-1/PD-L pathway also is involved in regulating autoimmune responses, making these proteins promising therapeutic targets for multiple sclerosis, arthritis, lupus, and type I diabetes, as well as a number of human cancers. BPS Bioscience is excited to announce the release of its products and services portfolio for research of the PD-1 pathway.

### PD-1 Proteins

BPS Bioscience provides an ever-growing portfolio of enzymes and kits suitable for enzymatic profiling, inhibitor screening assays, and drug discovery. BPS is the only company to offer biotinylated versions of PD-1, PD-L1 and PD-L2.

Protein	Catalog #	Amount
PD-1 (PDCD1)	71106	100 µg
PD-1 (PDCD1), FLAG-tag	71115	100 µg
PD-1 (PDCD1), Biotin-labeled	71109	50 µg
PD-1 (CD274), Biotin-labeled, Mouse	71118	50 µg
PD-1 (CD279), Fc Fusion, Mouse	71116	100 µg
PD-L1 (CD274)	71104	100 µg
PD-L1 (CD274), Biotin-labeled	71105	50 µg
PD-L1 (CD274), FLAG-tag	71183	100 µg
PD-L1 (CD274), Fc Fusion, Mouse	71117	100 µg
PD-L2 (CD273)	71107	100 µg
PD-L2 (CD273), Biotin-labeled	71108	50 µg



Purity and gel image of PD-1 (PDCD1), BPS cat. #71106.

The #1 Source for Active Enzymes



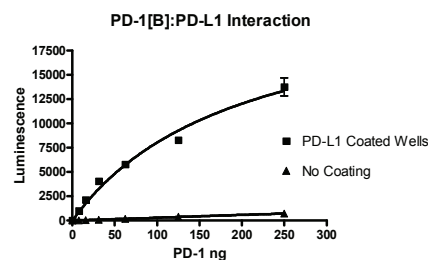
### PD-1 Assay Kits

Recent research has led to the emergence of promising clinical applications of PD-1 antagonists and antagonists to human disorders and diseases. BPS's PD-1/PD-L assay kits are the first commercially available assays designed for screening small molecule inhibitors for drug discovery.

Assay Kit	Catalog #	Amount
PD-1:PD-L1[Biotinylated] Inhibitor Screening Assay Kit	72003	96 rxns
PD-1:PD-L2[Biotinylated] Inhibitor Screening Assay Kit	72004	96 rxns
PD-L1 Inhibitor Screening Assay Kit	72005	96 rxns
PD-L2 Inhibitor Screening Assay Kit	72006	96 rxns
PD-1:PD-L2 TR-FRET Assay Kit	72012	384 rxns

### Antibodies

Antibody Name	Catalog #	Size
Anti-PD-L1 Neutralizing Antibody, Biotin-labeled	71214	50 µg
PD-1 Neutralizing Antibody	71120	50 µg



PD-1-PD-L1 binding activity, measured using the using the PD-L1 Inhibitor Screening Assay Kit, BPS cat. #72005.

Also available: **PD-1/PD-L screening and profiling services.**  
Please contact us for details and a free quote.

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