

### Human PD-L1 ELISA Kit, fluorescent ab278124

Recombinant SimpleStep ELISA<sup>®</sup>

[3 Images](#)

#### Overview

**Product name** Human PD-L1 ELISA Kit, fluorescent

**Detection method** Fluorescent

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
extract	8			2.7%

Inter-assay

Sample	n	Mean	SD	CV%
extract	3			4.3%

**Sample type**

Urine, Serum, Cell culture extracts, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma

**Assay type**

Sandwich (quantitative)

**Sensitivity**

1.04 pg/ml

**Range**

1.95 pg/ml - 4000 pg/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Urine	93	86% - 97%
Serum	97	94% - 97%
Cell culture extracts	102	99% - 106%
Cell culture media	93	82% - 100%
Hep Plasma	101	90% - 111%
EDTA Plasma	90	89% - 92%

Sample type	Average %	Range
Cit plasma	90	87% - 95%

**Assay time**

1h 30m

**Assay duration**

One step assay

**Species reactivity**

**Reacts with:** Human

**Product overview**

Human PD-L1 *in vitro* CatchPoint® SimpleStep ELISA® (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of PD-L1 protein in human serum, plasma, urine, cell extract and cell culture supernatants.

This CatchPoint SimpleStep ELISA kit has been **optimized for Molecular Devices Microplate Readers**. Click [here](#) for a list of recommended Microplate Readers.

If using a Molecular Devices' plate reader supported by SoftMax® Pro software, a preconfigured protocol for these CatchPoint SimpleStep ELISA Kits is available with all the protocol and analysis settings at [www.softmaxpro.org](http://www.softmaxpro.org)

The CatchPoint SimpleStep ELISA employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.

**Notes**

PD-L1 (also known as CD274 or B7-H1) is a membrane bound glycoprotein involved in regulation of the immune system. PD-L1 is expressed on a variety of inflammatory-activated cells as well as some carcinomas and in melanoma. PD-L1 binds to PD-1 and CD80, where it can suppress T cell activation and proliferation as well as induce apoptosis. Levels of PD-L1 are increased in the plasma of cancer patients as well as in cerebrospinal fluid of gliomas. PD-L1 can bind PD-1 in order to regulate T cell apoptosis.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

**Platform**

Microplate (12 x 8 well strips)

**Properties**

**Storage instructions**

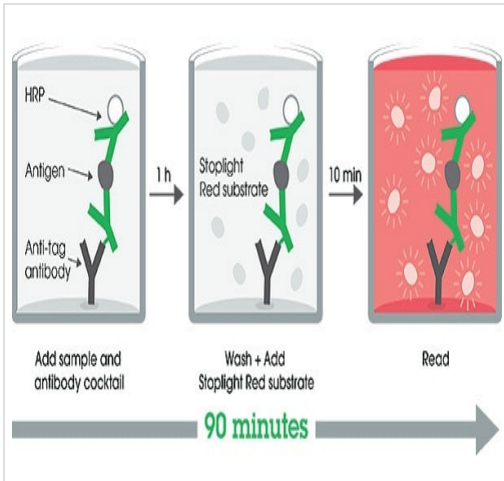
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl

Components	1 x 96 tests
10X Human PD-L1 [YCA-R23939-25] Capture Antibody	1 x 600µl
10X Human PD-L1 [28-8] Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human PD-L1 [28-8] Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

<b>Function</b>	Involved in the costimulatory signal, essential for T-cell proliferation and production of IL10 and IFNG, in an IL2-dependent and a PDCD1-independent manner. Interaction with PDCD1 inhibits T-cell proliferation and cytokine production.
<b>Tissue specificity</b>	Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.
<b>Sequence similarities</b>	Belongs to the immunoglobulin superfamily. BTN/MOG family. Contains 1 Ig-like C2-type (immunoglobulin-like) domain. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
<b>Cellular localization</b>	Cell membrane and Endomembrane system.





## Images



Catchpoint ELISA Protocol Diagram

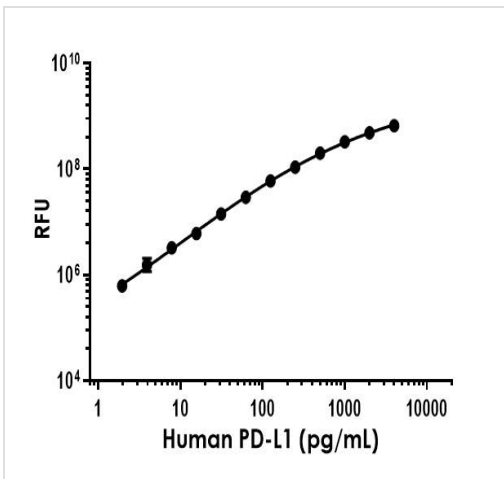
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

**Powered by recombinant antibodies**

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Recombinant Antibody Benefits

To learn more about the advantages of recombinant antibodies see [here](#).



Example of human PD-L1 standard curve in Sample Diluent NS.

The PD-L1 standard curve was prepared as described in Section 10. Raw data generated on SpectraMax iD3 Multi-Mode Microplate Reader is shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

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