

## Product datasheet

# Human IL1R2 ELISA Kit ab269548

Recombinant SimpleStep ELISA

[7 Images](#)

### Overview

**Product name** Human IL1R2 ELISA Kit

**Detection method** Colorimetric

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	3			1.8%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	8			2.3%

**Sample type** Cell culture supernatant, Urine, Serum, Hep Plasma, EDTA Plasma, Cit plasma

**Assay type** Sandwich (quantitative)

**Sensitivity** 24.96 pg/ml

**Range** 62.5 pg/ml - 4000 pg/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Urine	95	93% - 99%
Serum	110	106% - 116%
Hep Plasma	110	103% - 118%
EDTA Plasma	110	105% - 118%
Cit plasma	107	104% - 113%

**Assay time** 1h 30m

**Assay duration**

One step assay

**Species reactivity****Reacts with:** Human**Product overview**

Human IL1R2 ELISA Kit (ab269548) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL1R2 protein in edta plasma, serum, urine, cit plasma, hep plasma, and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IL1R2 with 24.96 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes**

IL1R2, interleukin 1 receptor, type II, is a key protein involved in the negative regulation of inflammatory and immune signaling. IL1R2 inhibits interleukins 1a and 1b and IL-1RAcP by binding to them without propagating a signaling cascade. Given its pivotal role in cell signaling, IL1R2 is currently under investigation for its role in a host of inflammatory and autoimmune-related pathologies. The antibodies for this kit were raised against a recombinant protein fragment of the mature human protein. This protein does not share a high sequence identity with mouse or rat and does not react. However, this kit does cross-react with monkey serum.

**Platform**

Pre-coated microplate (12 x 8 well strips)

**Properties****Storage instructions**

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

Components	1 x 96 tests
10X Human IL1R2 Capture Antibody	1 x 600µl
10X Human IL1R2 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human IL1R2 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

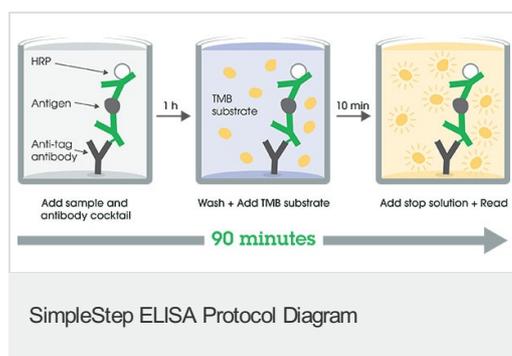
Components	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

**Function** Receptor for interleukin-1 alpha (IL-1A), beta (IL-1B), and interleukin-1 receptor antagonist protein (IL-1ra).

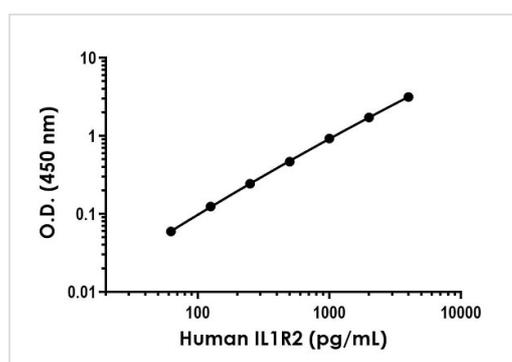
**Sequence similarities** Belongs to the interleukin-1 receptor family.  
Contains 3 Ig-like C2-type (immunoglobulin-like) domains.

**Cellular localization** Membrane.

## Images

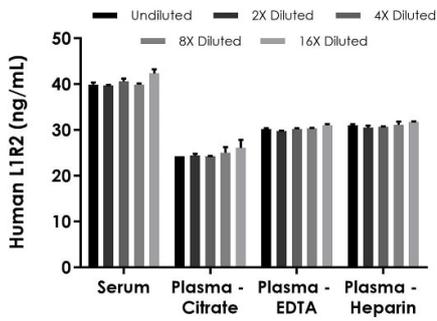


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



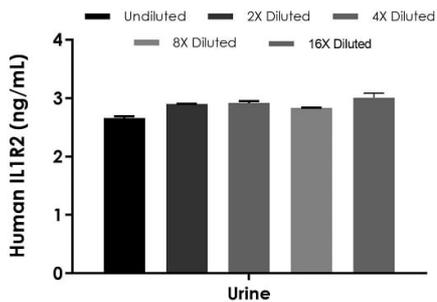
The IL1R2 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of human IL1R2 standard curve in Sample Diluent NS



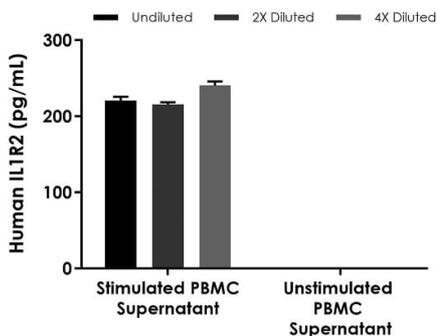
Interpolated concentrations of native IL1R2 in human serum and plasma samples.

The concentrations of IL1R2 were measured in duplicates, interpolated from the IL1R2 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:20, plasma (citrate) 1:20, plasma (EDTA) 1:20, and plasma (heparin) 1:20. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL1R2 concentration was determined to be 40.50 ng/mL in serum, 24.84 ng/mL in plasma (citrate), 30.33 ng/mL in plasma (EDTA), and 31.03 ng/mL in plasma (heparin).



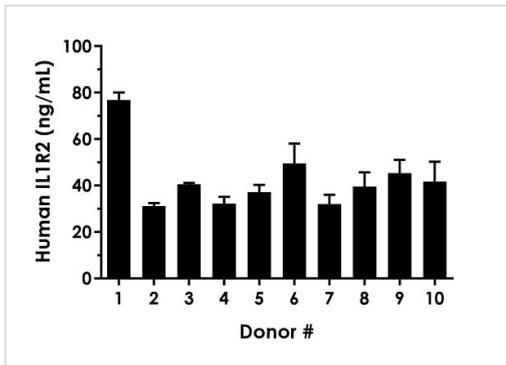
Interpolated concentrations of native IL1R2 in human urine samples.

The concentrations of IL1R2 were measured in duplicates, interpolated from the IL1R2 standard curves and corrected for sample dilution. Undiluted samples are as follows: urine 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL1R2 concentration was determined to be 2.87 ng/mL in urine.



Interpolated concentrations of native IL1R2 in human cell culture supernatant samples.

The concentrations of IL1R2 were measured in duplicates, interpolated from the IL1R2 standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated PBMC cell culture supernatant 100% and unstimulated PBMC cell culture supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL1R2 concentration was determined to be 226 pg/mL in stimulated PBMC cell culture supernatant and was undetectable in unstimulated PBMC cell culture supernatant.



Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL1R2 concentration was determined to be 43 ng/mL with a range of 31 – 77 ng/mL.

Serum from ten individual healthy human female donors was measured in duplicate.

Powered by recombinant antibodies

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

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

Sandwich ELISA - Human IL1R2 ELISA Kit  
(ab269548)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

- 
- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors