

Mouse IL-1RA ELISA Kit ab238258

Recombinant SimpleStep ELISA[®]

[6 Images](#)

Overview

Product name Mouse IL-1RA ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Supernatant	5			2.6%

Inter-assay

Sample	n	Mean	SD	CV%
Supernatant	3			3.1%

Sample type Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 10.3 pg/well

Range 46.88 pg/ml - 3000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	103	99% - 108%
Cell culture media	116	114% - 120%
Hep Plasma	121	112% - 126%
EDTA Plasma	96	93% - 98%
Cit plasma	100	95% - 106%

Assay time 1h 30m

Assay duration One step assay

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

Mouse IL-1RA ELISA Kit (ab238258) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-1RA protein in cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse IL-1RA with 10.3 pg/well 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.

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 Mouse IL-1RA Capture Antibody	1 x 600µl
10X Mouse IL-1RA Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BR	1 x 6ml
Mouse IL-1RA Lyophilized recombinant Protein	2 vials
Plate Seals	1 unit
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

Inhibits the activity of interleukin-1 by binding to receptor IL1R1 and preventing its association with the coreceptor IL1RAP for signaling. Has no interleukin-1 like activity. Binds functional interleukin-

1 receptor IL1R1 with greater affinity than decoy receptor IL1R2; however, the physiological relevance of the latter association is unsure.

Tissue specificity

The intracellular form of IL1RN is predominantly expressed in epithelial cells.

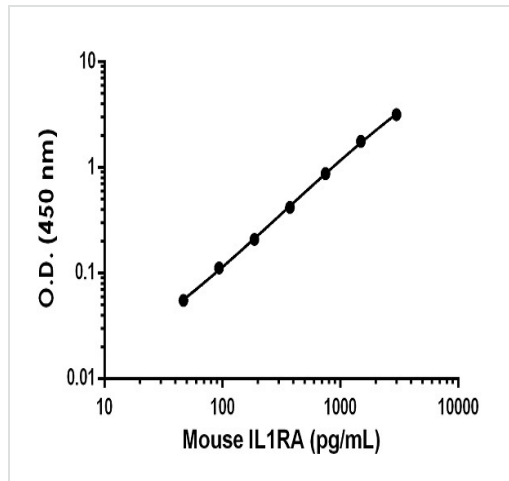
Involvement in disease

Microvascular complications of diabetes 4
Interleukin 1 receptor antagonist deficiency

Cellular localization

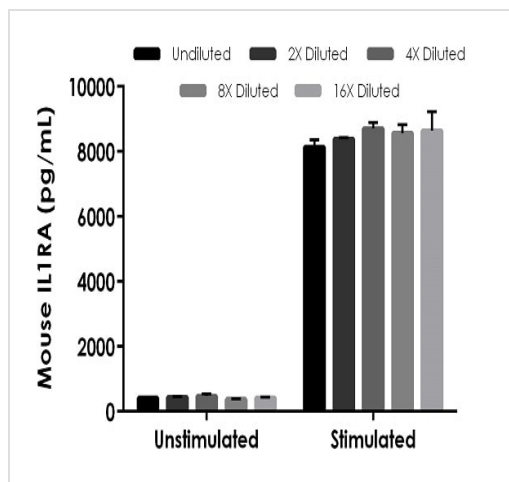
Cytoplasm and Secreted.

Images



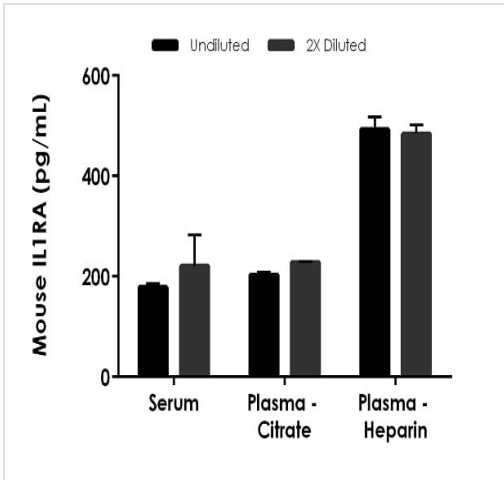
The IL1RA standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse IL1RA standard curve in Sample Diluent NS.



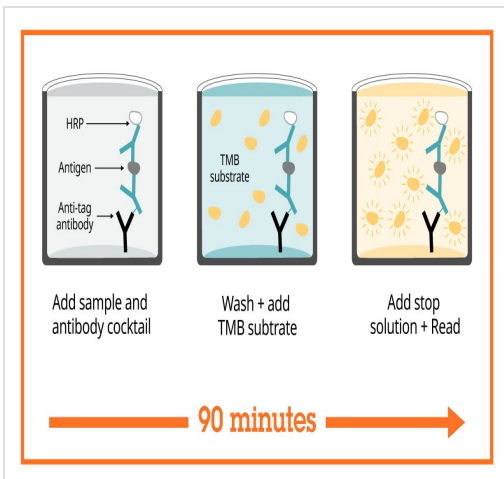
The concentrations of IL1RA were measured in duplicates, interpolated from the IL1RA standard curves and corrected for sample dilution. Undiluted samples are as follows: J774A.1 unstimulated 100%, and J774A.1 stimulated 12.5% The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL1RA concentration was determined to be 426 pg/mL in unstimulated J774A.1 and 8,581 pg/mL in stimulated J774A.1 cell culture supernatant.

Interpolated concentrations of native IL1RA in mouse cell culture supernatant samples.



Interpolated concentrations of native IL1RA in mouse serum and plasma samples.

The concentrations of IL1RA were measured in duplicates, interpolated from the IL1RA standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25% plasma (citrate) and plasma (heparin) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL1RA concentration was determined to be 200 pg/mL in serum, 216 pg/mL in plasma (citrate) and 488 pg/mL in plasma (heparin).



Sandwich ELISA - Mouse IL-1RA ELISA Kit (ab238258)

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



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Mouse IL-1RA ELISA Kit
(ab238258)

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

**Get more done with
SimpleStep ELISA**



Easy to use
Single-wash 90-minute protocol



Flexible
Matched antibody pairs available



Precision antibodies
High sensitivity, specificity and reproducibility



Scalable
Now in 10-pack and 384-well formats

Sandwich ELISA - Mouse IL-1RA ELISA Kit
(ab238258)

To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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

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