Datasheet for ABIN1889319
# IL1RN ELISA Kit

| 1 | Image |
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## Overview

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| Quantity: | 96 tests |
| Target: | IL1RN |
| Binding Specificity: | AA 27-178 |
| Reactivity: | Mouse |
| Method Type: | Sandwich ELISA |
| Detection Range: | 62.5-4000 pg/mL |
| Minimum Detection Limit: | 62.5 pg/mL |
| Application: | ELISA |

## Product Details

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| Purpose: | Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse IL-1RA/IL1RN |
| Brand: | PicoKine™ |
| Sample Type: | Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA) |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Immunogen: | Expression system for standard: E.coli Immunogen sequence: R27-Q178 |
| Specificity: | Expression system for standard: E.coli Immunogen sequence: R27-Q178 |
| Cross-Reactivity (Details): | There is no detectable cross-reactivity with other relevant proteins. |

## Product Details

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| Sensitivity: | <10pg/mL |
| Material not included: | Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl |

## Target Details

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| Target: | IL1RN |
| Alternative Name: | IL1RN (IL1RN Products) |
| Background: | Protein 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. |
| | Background: The interleukin-1 receptor antagonist(IL-1RA) is a protein that in humans is encoded by the IL1RN gene. The human IL1RN gene was localized to the long arm of chromosome 2 at band 2q14.2 by fluorescence in situ hybridization. IL-1RA is a member of the interleukin 1 cytokine family. This protein inhibits the activities of interleukin 1, alpha(IL1A) and interleukin 1, beta(IL1B), and modulates a variety of interleukin 1 related immune and inflammatory responses. |
| | Synonyms: Interleukin-1 receptor antagonist protein,IL-1RN,IL-1ra,IRAP,IL1 inhibitor,Il1rn,Il-1ra, Full Gene Name: Interleukin-1 receptor antagonist protein |
| | Cellular Localisation: Isoform 1: Secreted. |
| Gene ID: | 16181 |
| UniProt: | P25085 |
| Pathways: | NF-kappaB Signaling, Hormone Transport, Cancer Immune Checkpoints |

## Application Details

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| Application Notes: | Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing. |
| Plate: | Pre-coated |
| Protocol: | mouse IL-1RA ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for IL-1RA has been precoated onto 96-well plates. Standards(E.coli, R27-Q178) and test samples are added to the wells, a |

# Application Details

biotinylated detection polyclonal antibody from goat specific for IL-1RA is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse IL-1RA amount of sample captured in plate.

**Assay Procedure:** Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL mouse IL-1RA standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse IL-1RA standard solution and each sample be measured in duplicate.

**Assay Precision:**
- Sample 1: n=16, Mean(pg/ml): 476, Standard deviation: 30, CV(%): 6.3
- Sample 2: n=16, Mean(pg/ml): 1326, Standard deviation: 72.93, CV(%): 5.5
- Sample 3: n=16, Mean(pg/ml): 2760, Standard deviation: 129.72, CV(%): 4.7,
- Sample 1: n=24, Mean(pg/ml): 595, Standard deviation: 46.41, CV(%): 7.8
- Sample 2: n=24, Mean(pg/ml): 1533, Standard deviation: 95, CV(%): 6.2
- Sample 3: n=24, Mean(pg/ml): 3185, Standard deviation: 172, CV(%): 5.4
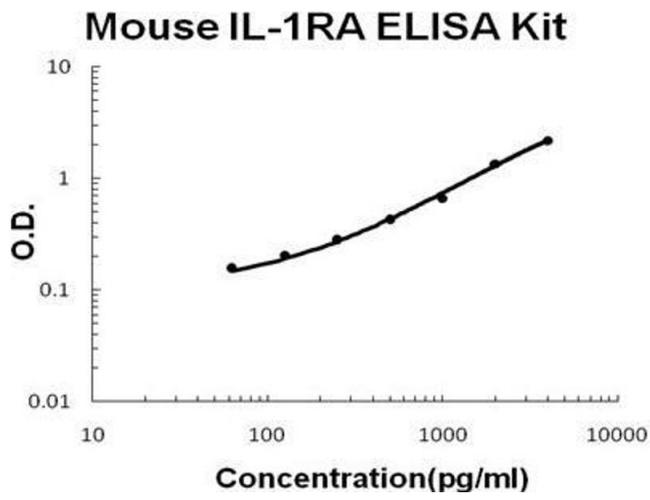
**Restrictions:** For Research Use only

# Handling

**Handling Advice:** Avoid multiple freeze-thaw cycles.

**Storage:** -20 °C,4 °C

**Storage Comment:** Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

**Expiry Date:** 12 months

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## Mouse IL-1RA ELISA Kit



**ELISA**

**Image 1.** Mouse IL-1RA/IL1RN PicoKine ELISA Kit standard curve