

## Recombinant Mouse IL-1RA/IL1RN Protein

**Catalog No.** PKSM041046

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

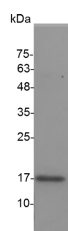
### Description

<b>Synonyms</b>	IL-1RN;IL-1ra;IRAP;IL1 inhibitor;Il1rn;Interleukin-1 Receptor Antagonist Protein
<b>Species</b>	Mouse
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Arg27-Gln178
<b>Accession</b>	P25085
<b>Calculated Molecular Weight</b>	18.3 kDa
<b>Observed molecular weight</b>	17 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measure by its ability to inhibit IL-1 alpha -dependent proliferation in D10.G4.1 cells.The ED <sub>50</sub> for this effect is < 50 ng/mL.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.1 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 98 % as determined by reducing SDS-PAGE.

### Background

Interleukin-1 receptor antagonist protein (Il1rn), also known as IL-1ra, IRAP or IL1 inhibitor, is a member of the

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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. The mouse Il1rn gene encodes a 178 amino acids (aa) protein with a 26 aa signal peptide. Mouse Il1rn protein shares 26% and 19% identity with its homologues IL-1 beta and IL-1 alpha, respectively. Il1rn can Inhibits the activity of interleukin-1 by binding to receptor IL1R1 and preventing its association with the coreceptor IL1RAP for signaling, but has no interleukin-1 like activity. Recently, an recombinant human Il1rn protein is used in the treatment of rheumatoid arthritis, an autoimmune disease in which IL-1 plays a key role.