



# Recombinant Protein Technical Manual

## Recombinant Mouse ILRA/IL1RN Protein

RPES1137

### Product Data:

**Product SKU:** RPES1137

**Size:** 10µg

**Species:** Mouse

**Expression host:** E. coli

**Uniprot:** P25085

### Protein Information:

**Molecular Mass:** 17.5 kDa

**AP Molecular Mass:** 16 kDa

**Tag:**

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** ILRN;ILRa;IRAP;IL1 inhibitor;Il1rn;Interleukin Receptor Antagonist Protein

## Immunogen Information:

**Sequence:** Arg27-Gln178

## Background:

Interleukin receptor antagonist protein (Il1rn), also known as ILra, IRAP or IL1 inhibitor, 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. 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 beta and IL alpha, respectively. Il1rn can Inhibits the activity of interleukin by binding to receptor IL1R1 and preventing its association with the coreceptor IL1RAP for signaling, but has no interleukin like activity. Recently, an recombinant human Il1rn protein is used in the treatment of rheumatoid arthritis, an autoimmune disease in which IL plays a key role.