



## Recombinant Protein Technical Manual

**Recombinant Mouse IL11RA/IL11R $\alpha$  Protein (His Tag)(Active)**  
RPES4448

### Product Data:

**Product SKU:** RPES4448

**Size:** 100 $\mu$ g

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_001156873.1

### Protein Information:

**Molecular Mass:** 39.2 kDa

**AP Molecular Mass:** 45-50 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to bind mouse IL6ST in a functional ELISA.

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per  $\mu$ g of the protein 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 sterile PBS, pH 7.4

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

**Application:** Functional ELISA

**Synonyms:** AI314697;GP130;Il1ra;Il11ra;Il11ra1;Il11ra2;NR1;RP2367I12.2

## Immunogen Information:

**Sequence:** Met 1-Gln 367

## Background:

Interleukin 11 receptor, alpha subunit (IL11RA/IL1RA) is a subunit of the interleukin 11 receptor which is a member of the hematopoietic cytokine receptor family. IL11RA/IL1RA is expressed in a number of cell lines, including the myelogenous leukemia cell line K562, the megakaryocytic leukemia cell line Mo7E, the erythroleukemia cell line TF1, and the osteosarcoma cell lines, MG-63 and Saos-2. It is also expressed in normal and malignant prostate epithelial cell lines. Expression levels are increased in prostate carcinoma. This particular receptor is very similar to ciliary neurotrophic factor, since both contain an extracellular region with a 2-domain structure composed of an immunoglobulin-like domain and a cytokine receptor-like domain. Alternative splicing has been observed at this locus, and three variants encoding two different isoforms have been identified. IL11RA/IL1RA is a receptor for interleukin1. The receptor systems for IL6, LIF, OSM, CNTF, IL11 and CT1 can utilize IL6ST for initiating signal transmission. Defects in IL11RA/IL1RA are a cause of craniosynostosis and dental anomalies (CRSDA). CRSDA is a disorder characterized by craniosynostosis, maxillary hypoplasia, and dental anomalies, including malocclusion, delayed and ectopic tooth eruption, and/or supernumerary teeth. Some patients also display minor digit anomalies, such as syndactyly and/or clinodactyly.