



# Recombinant Protein Technical Manual

## Recombinant Human IL1RL1/ST2 Protein (isoform a, His Tag)(Active) RPES4651

### Product Data:

**Product SKU:** RPES4651

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_057316.3

### Protein Information:

**Molecular Mass:** 36.3 kDa

**AP Molecular Mass:**

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA.2. Immobilized recombinant human IL33 at 10 µg/mL (100 µl/well) can bind biotinylated human IL1RL1 (isoform A) with a linear range of 0.032-8 µg/ml.

**Purity:** > 98 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg 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:** DER4;FIT;IL1RL1;IL33R;IL-1 R4;ST2;ST2L;ST2V;T1

## Immunogen Information:

**Sequence:** Met 1-Ser 328

## Background:

IL receptor–like 1 (IL1RL1) is a membrane receptor involved in TH2 inflammatory responses and eosinophilia. It has previously been described that levels of the interleukin like 1 (IL1RL1) protein can be used to diagnose cardiovascular disease and determine the prognosis for a patient with cardiovascular disease. The ligand for IL1RL1 has been described, and named IL-33. Mutants in IL1RL1 have been associated with blood eosinophil counts in a genome-wide association study and with asthma in family-based and case-control studies. As an important mediator involved in many immune and inflammatory responses, this cytokine has been implicated as a regulator of both the development and effector phases of type 2 helper T cell responses, and as a negative feedback modulator of macrophage pro-inflammatory function. IL33 is a specific ligand of ST2L and induces production of Th2 cytokines.