



# Recombinant Protein Technical Manual

## Recombinant Rat IL18R1 Protein (Fc Tag)

RPES0619

### Product Data:

**Product SKU:** RPES0619

**Size:** 50µg

**Species:** Rat

**Expression host:** HEK293 Cells

**Uniprot:** NP\_001100375.1

### Protein Information:

**Molecular Mass:** 62.5kDa

**AP Molecular Mass:** 105 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 97 % as determined by 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:**

**Synonyms:** IL18R1

## Immunogen Information:

**Sequence:** Met 1-Gly 326

## Background:

Interleukin8 receptor 1 (IL18R1) also known as CD218 antigen-like family member A, CDw218a, IL1 receptor-related protein and CD218a, is an interleukin receptor of the immunoglobulin superfamily. IL18R1 is found expressed in lung, leukocytes, spleen, liver, thymus, prostate, small intestine, colon, placenta, and heart, and is absent from brain, skeletal muscle, pancreas, and kidney. High level of expression is found in Hodgkin disease cell lines. This receptor is specifically binds interleukin 18 (IL18), and is essential for IL18 mediated signal transduction. IL18R1 contains 3 Ig-like C2-type (immunoglobulin-like) domains and 1 TIR domain. It is a single-pass type I membrane protein. IFN-alpha and IL12 are reported to induce the expression of this receptor in NK and T cells. The increased expression of IL18R1 may contribute pathogenically to disease and is therefore a potential therapeutic target. The absence of a genetic association in the IL18R1 gene itself suggests regulation from other parts of the genome, or as part of the inflammatory cascade in multiple sclerosis without a prime genetic cause.