Recombinant Rat IL18R1 Protein (Fc Tag)

Catalog Number: PKSR030330

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

| Description | |
|----------------|--|
| Species | Rat |
| Source | HEK293 Cells-derived Rat IL18R1 protein Met 1-Gly 326, with an C-terminal hFc |
| Calculated MW | 62.5 kDa |
| Observed MW | 105 kDa |
| Accession | NP_001100375.1 |
| Bio-activity | Not validated for activity |
| Properties | |
| Purity | > 97 % as determined by reducing SDS-PAGE. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | 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 $< -20^{\circ}$ 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 |
| | Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants |
| | before lyophilization. |
| | Please refer to the specific buffer information in the printed manual. |
| Reconstitution | Please refer to the printed manual for detailed information. |



| KDa | М |
|--------------|---|
| 116 66.2 | |
| 45.0 | _ |
| 35.0 | |
| 25.0 | |
| | |
| 18.4 14.4 | = |

> 97 % as determined by reducing SDS-PAGE.

Background

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Interleukin-18 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.