

# Human IL18RAP / IL1R7 Protein (Fc Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 10176-H02H

## General Information

### Gene Name Synonym:

ACPL; CD218b; CDw218b; IL-18R-beta; IL-18RAcP; IL-18Rbeta; IL-1R-7; IL-1R7; IL-1RAcPL; IL18RB

### Protein Construction:

A DNA sequence encoding the human IL18RAP (NP\_003844.1) (Met 1-Gly 357) was fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

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

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Phe 20

### Molecular Mass:

The recombinant human IL18RAP/Fc chimera is a disulfide-linked homodimeric protein. The reduced monomer consists of 575 amino acids and has a calculated molecular mass of 65.2 kDa. As a result of glycosylation, the apparent molecular mass of rhIL18RAP/Fc monomer is approximately 80-90 kDa in reduced SDS-PAGE.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

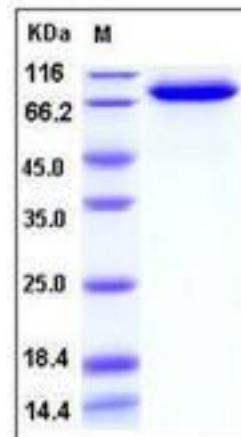
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Interleukin 18 receptor accessory protein, also known as IL18RAP and CDw218b (cluster of differentiation w218b), is an accessory subunit of the heterodimeric receptor for IL18. This protein enhances the IL18 binding activity of IL18R1 (IL1RRP), a ligand binding subunit of IL18 receptor. The coexpression of IL18R1 and this protein is required for the activation of NF-kappaB and MAPK8 (JNK) in response to IL18. IL18RAP is required for the high affinity binding of interleukin 18 (IL-18) to its receptor complex. IL18RAP together with IL18R1 mediates IL-18-dependent activation of NF-kappa-B and JNK. Two putative isoforms of IL18RAP were detected and the ratios and total levels of these isoforms may contribute to the aetiology of coeliac disease. IL18R1 and IL18RAP polymorphisms have been found associated with diseases such as schizophrenia, HSV1 seropositivity and atopic asthma. Analysis of IL18R1 and IL18RAP SNPs in 5 European prospective cohorts suggests that the variability of these genes are unlikely to contribute to modulate the risk of CVD in European populations.

## References

- 1.Zhernakova A, *et al.* (2008) Genetic analysis of innate immunity in Crohn's disease and ulcerative colitis identifies two susceptibility loci harboring CARD9 and IL18RAP. *Am J Hum Genet.* 82(5): 1202-10.
- 2.Grisoni ML, *et al.* (2009) Lack of association between polymorphisms of the IL18R1 and IL18RAP genes and cardiovascular risk: the MORGAM Project. *BMC Med Genet.* 10: 44.
- 3.Koskinen LL, *et al.* (2009) Association study of the IL18RAP locus in three European populations with coeliac disease. *Hum Mol Genet.* 18(6): 1148-55.

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