

# Human IL-1R8 / IL1RAPL1 Protein (Fc Tag)

Catalog Number: 10177-H02H



**Sino Biological Inc.**  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

IL1R8; IL1RAPL; MRX10; MRX21; MRX34; OPHN4; TIGIRR-2; 6330532G10Rik; C030039N24; IL1R8; IL1RAPL; MRX34; OPHN4; TIGIRR-2

### Protein Construction:

A DNA sequence encoding the human IL1R8 (NP\_055086.1) extracellular domain (Met 1-Leu 354) was fused with the Fc region of human IgG1 at the C-terminus.

**Source:** Human

**Expression Host:** Human 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:** Leu 19

### Molecular Mass:

The recombinant human IL1R8/Fc is a disulfide-linked homodimer. The reduced monomer consists of 574 amino acids and has a predicted molecular mass of 65 kDa. As a result of glycosylation, the rh IL1R8/Fc monomer migrates with an apparent molecular mass of 80-85 kDa in SDS-PAGE under reducing conditions.

### 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:

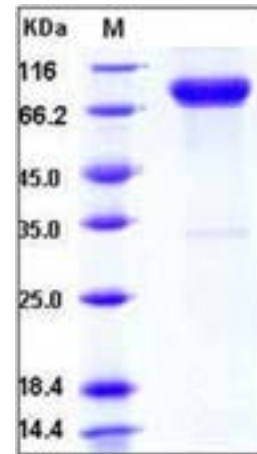
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Interleukin-1 receptor accessory protein-like 1 (IL1RAPL1) is a member of interleukin-1 receptor family. The protein structurally comprises three extracellular immunoglobulin domains, which presumably mediate binding of an as yet unidentified ligand, a transmembrane region, and an intracellular domain, which is likely to enable signalling via the NFκB pathway. The means of signalling is almost certain to be identical to that used by the IL1R family and the more distally related Toll protein. L1RAPL1 protein physically interacts via its 150 aa C-terminal domain with neuronal calcium sensor-1 (NCS-1), a protein widely expressed in neurons and the related chromaffin and PC12 cells. IL1RAPL1 is an integral membrane protein responsible for a nonsyndromic form of mental retardation (MR). It is suggested to affect human cognitive ability to some extent, especially the memory and concentration capability.

## References

1. Frdric Gambino, et al. (2007) IL1-receptor accessory protein-like 1 (IL1RAPL1), a protein involved in cognitive functions, regulates N-type Ca<sup>2+</sup>-channel and neurite elongation. *Proc Natl Acad Sci.* 104 (21): 9063-8.
2. Wheway JM, et al. (2003) A complex deletion-inversion-deletion event results in a chimeric IL1RAPL1-dystrophin transcript and a contiguous gene deletion syndrome. *J Med Genet.* 40: 127-131.

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