

Recombinant Protein Technical Manual Recombinant Human ILRAcP/ILR3 Protein (His Tag) RPES1816

Product Data:

| Product SKU: RPES1816 | <b>Size:</b> 100µg            |
|-----------------------|-------------------------------|
| Species: Human        | Expression host: HEK293 Cells |

**Uniprot:** NP\_002173.1

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| Molecular Mass:    | 40.7 kDa   |
|--------------------|--|
| AP Molecular Mass: | 50-55 kDa  |
| Tag:               | C-His  |
| Bio-activity:      |  |
| Purity:            | > 98 % as determined by reducing SDS-PAGE.   |
| Endotoxin:         | < 1.0 EU per $\mu g$ as determined by the LAL method.  |
| Storage:           | Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.<br>Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of<br>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:       |  |
| Svnonvms:          | C3orf13:ILRAcP:IL1R3   |

## Sequence: Met 1-Glu 359

## Background:

Interleukin receptor accessory protein (ILRACP) also known as Interleukin receptor member 3 (ILR3) is a a cytokine receptor which binds interleukin 1. The IL receptor accessory protein (IL1RAP) is a transmembrane protein that interacts with ILR and is required for IL signal transduction. Interleukin 1 induces synthesis of acute phase and proinflammatory proteins during infection, tissue damage, or stress, by forming a complex at the cell membrane with an interleukin 1 receptor and an accessory protein. ILRACP/ILR3 is a necessary part of the interleukin 1 receptor complex which initiates signalling events that result in the activation of interleukin 1-responsive genes. Alternative splicing of this gene results in two transcript variants encoding two different isoforms, one membrane-bound and one soluble. The ratio of soluble to membrane-bound forms increases during acute-phase induction or stress. ILRACP/ILR3 mediates interleukin-dependent activation of NF-kappa-B. Isoform 1 is part of the membrane-bound form of the IL receptor. Signaling involves formation of a ternary complex containing IL1R1, TOLLIP, MYD88, and IRAK1 or IRAK2. Isoform 2 modulates the response to interleukins by associating with soluble IL1R1 and enhancing interleukin-binding to the decoy receptor.