

## Recombinant Human IL1R1/CD121a Protein (Fc Tag)

**Catalog Number:** PKSH032560

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

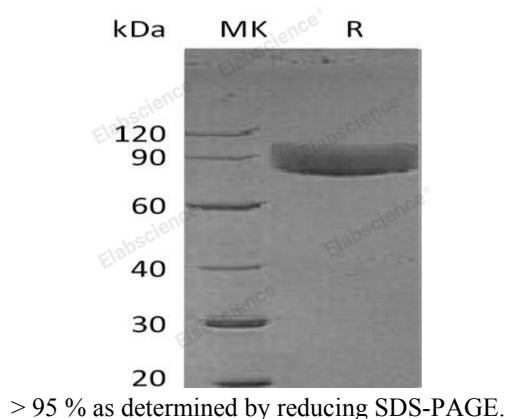
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human IL1R1;CD121a protein Leu18-Thr332, with an C-terminal Fc
<b>Calculated MW</b>	62.9 kDa
<b>Observed MW</b>	80-105 kDa
<b>Accession</b>	P14778
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

### Data



### Background

Interleukin 1 receptor, type I (IL-1R1) is an interleukin receptor that belongs to the interleukin-1 receptor family. IL-1R1 is an 80 kDa transmembrane protein that is expressed predominantly by T cells, fibroblasts, and endothelial cells. This gene along with IL1R2, IL1RL2, and IL1RL1 form a cytokine receptor gene cluster in a region mapped to chromosome 2q12. IL-1R1 is an important mediator involved in many cytokine induced immune and inflammatory responses. It binds to interleukin-1 associates with the coreceptor IL1RAP to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B, MAPK and other pathways. The signaling involves the recruitment of adapter molecules such as TOLLIP, MYD88, and IRAK1 or IRAK2 via the respective TIR domains of the receptor/coreceptor subunits. It also binds ligands with comparable affinity and binding of antagonist IL1RN prevents association with IL1RAP to form a signaling complex. An IL1 receptor accessory protein that can heterodimerize with the Type I receptor in the presence of IL1 $\alpha$  or IL1 $\beta$  but not IL1 $\alpha$ , was identified. Recombinant IL1 soluble receptor Type I is a potent antagonist of IL1 action.