

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

**Catalog No.** PKSH033447

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

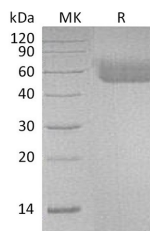
### Description

<b>Synonyms</b>	CD121A;D2S1473;IL-1 RI;IL-1R-alpha;IL-1R1;IL1R;IL1RA;P80;Interleukin-1 receptor type 1;IL-1R-1;IL-1RT-1;IL-1RT1;CD121 antigen-like family member A;Interleukin-1 receptor alpha;IL-1R-alpha
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Leu18-Thr332
<b>Accession</b>	P14778
<b>Calculated Molecular Weight</b>	37.0 kDa
<b>Observed molecular weight</b>	48-66 kDa
<b>Tag</b>	C-His
<b>Bioactivity</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% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

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 IL1ra, was identified. Recombinant IL1 soluble receptor Type I is a potent antagonist of IL1 action.