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**Recombinant Human IL-1 Receptor Type 1/IL-1R-1 Protein(C-Fc)****Cat.NO.: TP05036**

3th Edition

**Synonyms:** 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; p80; CD121a

**Description:** 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 $\beta$  or IL1 $\alpha$  but not IL1 $\gamma$ , was identified. Recombinant IL1 soluble receptor Type I is a potent antagonist of IL1 action.

**Form:** PBS

**Molecular Weight:** 62.9 kDa

**Sequences:** Leu18-Thr332

**Purity:** > 95% by HPLC

**Concentration:**

**Endotoxin Level:** <1.0 EU per 1  $\mu$ g of protein (determined by LAL method)

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.