

# Interleukin-1 receptor-like 1, His Tag, human recombinant (rHulL1RL1-His)

Catalog No: 97285 Lot No: XXXXX Source: *E. coli* 

Synonyms: Interleukin-1 receptor-like 1, Protein ST2, IL1RL1, DER4, ST2, T1, ST2L, ST2V, FIT-1, MGC32623

#### **Background**

The IL1RL1 gene is a member of the IL-1 receptor family, encoding a transmembrane protein with a structure similar to IL-1R1. IL1RL1 is a receptor for interleukin-33, its stimulation recruits MYD88, IRAK1, IRAK4, and TRAF6, followed by phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8. IL1RL1 may possibly be involved in helper T-cell function. IL1RL1 is highly expressed in kidney, lung, placenta, stomach, skeletal muscle, colon and small intestine. A soluble form of the IL1RL1 is produced from the same gene by alternative splicing and was shown to be expressed in several cell types including fibroblasts and mast cells. Soluble IL1RL1 also acts as a negative regulator of Th2 cytokine production and high levels have been reported in several disease states and conditions including asthma, sepsis and myocardial infarction. Analysis of the similar gene in mouse suggested that the IL1RL1 receptor can be induced by proinflammatory stimuli, and may be involved in the function of helper T cells.

### Description

IL1RL1 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 310 amino acids (19-328) corresponding to the soluble IL1RL1 coding sequence, having a molecular weight of 39.5 kDa. IL1RL1 is fused with a 4.5 kDa N-terminal hexahistidine tag and is purified by proprietary chromatographic techniques.

## **Physical Appearance**

Sterile filtered clear solution.

## **Formulation**

The IL1RL1 protein solution is supplied in 25 mM sodium acetate pH 4.8 and 50% glycerol.

## Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

#### **Purity**

Greater than 95.0% as determined by SDS-PAGE.

## Usage

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