



# Recombinant Protein Technical Manual

## Recombinant Human LILRA5 Protein (His Tag)

RPES1246

### Product Data:

**Product SKU:** RPES1246

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** A6NI73

### Protein Information:

**Molecular Mass:** 26.1 kDa

**AP Molecular Mass:** 35-40 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of 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 a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Leukocyte immunoglobulin-like receptor subfamily A member 5; CD85 antigen-like family member F; Immunoglobulin-like transcript 11; ILT1; Leukocyte immunoglobulin-like receptor 9; LIR-9; CD85f; LILRA5; LILRB7;CD85F;ILT11;LILRB7;LIR-9;LIR9

## Immunogen Information:

**Sequence:** Gly42-Arg268

## Background:

Leukocyte Immunoglobulin-like Receptor Subfamily A Member 5 (LILRA5) is a member of the leukocyte immunoglobulin-like receptors (LILR), comprise a family of activating and inhibitory type immunoreceptors. LILRA5 consists of a 227 amino acid (aa) extracellular domain (ECD), a 21 aa transmembrane segment, and a 10 aa cytoplasmic tail. The ECD contains two Ig-like domains and the transmembrane segment contains a positively charged aspartic acid residue which may mediate its association with the signaling molecule, FcR common gamma chain. LILRA5 is expressed by monocytes, macrophages, and neutrophils. Cross-linking of LILRA5 on monocytes induces the expression of pro-inflammatory cytokines (ILbeta, IL-6, TNF-alpha) as well as the anti-inflammatory IL0. It can be detected in tissues of the hematopoietic system, including bone marrow, spleen, lymph node and peripheral leukocytes. Crosslink of ILT1 on the surface of monocytes has been shown to induce calcium flux and secretion of several proinflammatory cytokines, which suggests the roles of this protein in triggering innate immune responses.