

**DESCRIPTION**

**Source** Human embryonic kidney cell, HEK293-derived  
Gly24-Asn449, with a C-terminal 6-His tag  
Accession # NP\_001124389

**N-terminal Sequence Analysis** Gly24

**Predicted Molecular Mass** 48 kDa

**SPECIFICATIONS**

**SDS-PAGE** 70-81 kDa, reducing conditions

**Activity** Measured by its binding ability in a functional ELISA.  
When Recombinant Human LILRA2/CD85h/ILT1 is coated at 2 µg/mL, Recombinant Human Angiotensin-like Protein 7/ANGPTL7. (Catalog # 914-AN) binds with a typical ED<sub>50</sub> of 150-900 ng/mL.

**Endotoxin Level** <0.10 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation** Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

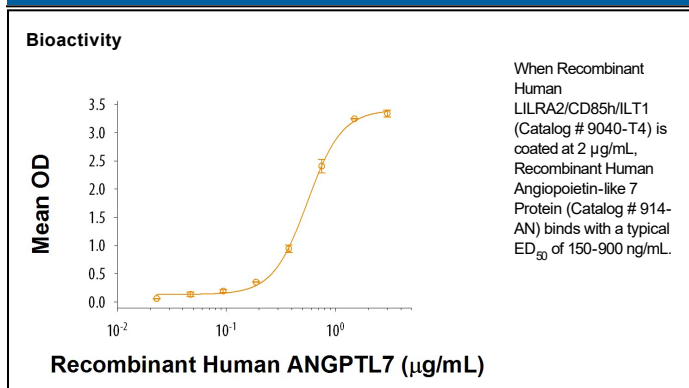
**Reconstitution** Reconstitute at 500 µg/mL in PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**DATA**



**BACKGROUND**

LILRA2, also known as ILT1, CD85h, and LIR7, is an approximately 70 kDa variably glycosylated transmembrane protein that regulates immune cell activation (1). Mature human LILRA2 consists of a 426 amino acid (aa) extracellular domain (ECD) with 4 Ig-like domains, a 21 aa transmembrane segment, and a 13 aa cytoplasmic tail (2). Alternative splicing generates isoforms with short deletions between the fourth Ig-like domain and the transmembrane region, and an isoform that is truncated C-terminal to the fourth Ig-like domain (3, 4). LILRA2 is expressed on monocytes, neutrophils, basophils, and eosinophils (5-7). It contains a positively charged arginine residue in its transmembrane segment, enabling association with the signaling protein Fcε RI gamma (5). Cross-linking of LILRA2 on monocytes induces the production of multiple cytokines as well as the upregulation of Fcγ receptors (6, 7). Cross-linking also restricts monocyte differentiation into immature dendritic cells, phagocytic activity, and antigen presentation to T cells (6, 7). R&D Systems in-house testing indicates that LILRA2 binds to Angiotensin-like 7, consistent with the demonstrated functional interactions between other members of these protein families (8).

**References:**

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2. Borges, L. *et al.* (1997) J. Immunol. **159**:5192.
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4. Mamegano, K. *et al.* (2008) Genes Immun. **9**:214.
5. Nakajima, H. *et al.* (1999) J. Immunol. **162**:5.
6. Lu, H.K. *et al.* (2012) PLoS One **7**:e33478.
7. Lee, D.J. *et al.* (2007) J. Immunol. **179**:8128.
8. Zheng, J. *et al.* (2012) Nature **485**:656.