

DESCRIPTION

Source Mouse myeloma cell line, NS0-derived
Pro17-Asn461, with a C-terminal 6-His tag
Accession # O75019

N-terminal Sequence Analysis Pro17 & Gly24

Predicted Molecular Mass 49 kDa

SPECIFICATIONS

SDS-PAGE 62-76 kDa, reducing conditions

Activity Measured by its binding ability in a functional ELISA.
When Recombinant Human LILRA1/CD85i/LIR-6 (Catalog # 9226-T4) is coated at 2 µg/mL, Recombinant Human Angiotensin-like 7/ANGPTL7 (Catalog # 914-AN) binds with an ED₅₀ = 0.3-1.8 µg/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

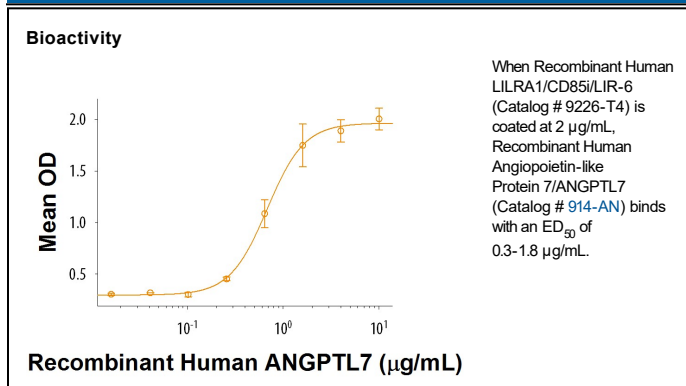
Reconstitution Reconstitute at 250 µg/mL in PBS.

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

LILRA1, also known as CD85i and LIR-6, is an approximately 70 kDa variably glycosylated transmembrane protein that regulates immune cell activation (1). Mature human LILRA1 consists of a 445 amino acid (aa) extracellular domain (ECD) with 4 Ig-like domains, a 21 aa transmembrane segment, and a 7 aa cytoplasmic tail (2). The transmembrane segment contains a positively charged arginine which may mediate association with signaling molecules. Alternative splicing generates an isoform that lacks the third and fourth Ig-like domains (2). LILRA1 is expressed on monocytes (3, 4) and binds to the free heavy chain of the MHC class I molecule HLA-B27 (4, 5). It is activated in response to the BCG mycobacterial strain (6). R&D Systems in-house testing indicates that LILRA1 binds to Angiotensin-like 7, consistent with the demonstrated functional interactions between other members of these protein families (7).

References:

1. Thomas, R. *et al.* (2010) Clin. Rev. Allergy Immunol. **38**:159.
2. Borges, L. *et al.* (1997) J. Immunol. **159**:5192.
3. Tedla, N. *et al.* (2008) J. Leukoc. Biol. **83**:334.
4. Allen, R.L. *et al.* (2001) J. Immunol. **167**:5543.
5. Jones, D.C. *et al.* (2011) J. Immunol. **186**:2990.
6. Hogan, L.E. *et al.* (2016) Sci Rep. **6**:21780.
7. Zheng, J. *et al.* (2012) Nature **485**:656.