

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse LILRA6/CD85b protein		
	Mouse LILRA6/CD85b/ILT8 (Gly24-Asn629) Accession # NP_035220	IEGRMDP	Mouse IgG _{2a} (Glu98-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Gly24		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	95 kDa		

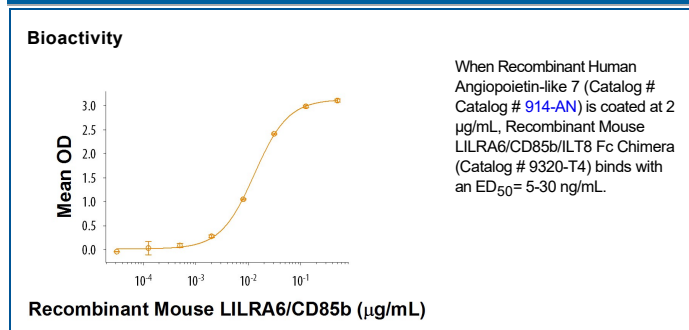
SPECIFICATIONS

SDS-PAGE	97-118 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human Angiopoietin-like Protein 7/ANGPTL7 (Catalog # 914-AN) is coated at 2 µg/mL, Recombinant Mouse LILRA6/CD85b Fc Chimera binds with an ED ₅₀ = 5-30 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 MES and NaCl. 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. <ul style="list-style-type: none"> • 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

LILRA6, also known as ILT8, CD85b, and PIR-A3 (in mouse), is a transmembrane molecule that belongs to the LILR family of immune regulatory proteins (1, 2). LILRA family members augment immune responses, while LILRB proteins inhibit signaling events (3). The extracellular region (ECD) of mouse LILRA6/PIR-A3 contains 6 immunoglobulin-like domains in its extracellular region, although the human protein contains four Ig-like domains. Within common regions of their ECDs, human LILRA6 shares 53% amino acid sequence identity with mouse PIR-A3. It contains a positively charged arginine residue in the transmembrane segment which mediates association with the signaling protein Fc ϵ RI gamma (4). LILRA6 is primarily expressed on monocytes (5). Its gene copy number is highly variable and is positively associated with the development of atopic dermatitis (2, 6). Allelic polymorphisms are differentially able to mediate immune cell detection of necrotic cells (7, 8). R&D Systems in-house testing indicates that LILRA6 binds to Angiotensin-like 7, consistent with the demonstrated functional interactions between other members of these protein families (9).

References:

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3. Anderson, K.J. and R.L. Allen (2009) Immunology **127**:8.
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7. Jones, D.C. *et al.* (2016) Oncotarget **7**:15618.
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