

DESCRIPTION

Source Mouse myeloma cell line, NS0-derived
Ala18-Ser427, with a C-terminal 6-His tag
Accession # Q5DRQ8

N-terminal Sequence Analysis Ala18

Predicted Molecular Mass 46.5 kDa (monomer)

SPECIFICATIONS

SDS-PAGE 60-70 kDa, reducing conditions

Activity Measured by its ability to bind mouse IgG with an estimated $K_D < 300$ nM.

Endotoxin Level <0.01 EU per 1 µg of the protein by the LAL method.

Purity >80%, by SDS-PAGE under reducing conditions and visualized by silver stain.

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

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 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.

BACKGROUND

FCRLB, also known as FCRL2, FCY, and FREL2, is a 60 kDa protein with sequence homology to classical Fc receptors. There are at least six type 1 transmembrane FCRL proteins and two that lack transmembrane segments. Each family member contains between three and nine immunoglobulin-like domains. FCRL proteins are differentially expressed within the B cell lineage and can either promote or inhibit B cell proliferation and activation (1, 2). According to R&D Systems testing, FCRLB binds to purified mouse IgG. Mouse FCRLB shares 82% and 94% aa sequence identity with human and rat FCRLB, respectively. It contains a putative signal peptide, three immunoglobulin-like domains, and a mucin-like stalk that is rich in Pro, Ser, and Thr residues (1 - 3). When expressed in transfectants, FCRLB is not secreted but shows a diffuse intracellular localization (4, 5). FCRLB is expressed at a low level in placenta and in B lineage cells of the germinal center (4, 5). It is up-regulated in B cells by BAFF and LPS (3). Among non-hematopoietic cells, FCRLB is expressed in fibroblasts, melanocytes, and melanoma (3, 4, 6). It is preferentially expressed in non-proliferating cells and at the onset of apoptosis (3, 5).

References:

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4. Chikae, N.A. *et al.* (2005) Genomics **85**:264.
5. Wilson, T.J. and M. Colonna (2005) Genes Immun. **6**:341.
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