Recombinant Human FCRL4/FcRH4 His-tag

Catalog Number: 2426-FC

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived human FCRL4/FcRH4 protein Ala18-Arg385, with a C-terminal 6-His tag Accession # Q96PJ5
N-terminal Sequence Analysis	Ala18
Predicted Molecular Mass	42 kDa

SPECIFICATIONS

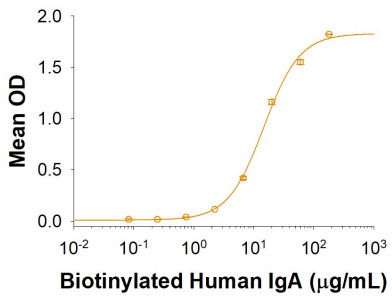
SDS-PAGE	53-60 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human FCRL4/FcRH4 is immobilized at 0.5 µg/mL (100 µL/well), Biotinylated Human IgA binds with an ED_{50} of 5-20 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL 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	• 12 months from date of receipt, ≤ -20 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, ≤ -20 °C under sterile conditions after reconstitution.

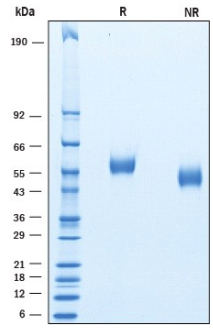
DATA

Binding Activity



When Recombinant Human FCRL4 (Catalog # 2426-FC) is coated onto a microplate at 0.5 µg/mL, Biotinylated Human IgA binds with an ED_{50} of 5-20 µg/mL.

SDS-PAGE



2 µg/lane of Recombinant Human FCRL4/FcRH4 was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 53-60 kDa and 45-52 kDa, respectively.

BACKGROUND

Fc receptor-like 4 (FCRL4), also known as FcRH4, IFGP2 and IRTA1, is a member of the Ig superfamily transmembrane protein, which is preferentially expressed in B cells and contains immunoreceptor tyrosine-based inhibitory motifs (ITIMs) (1). Mature human FCRL4 consists of a 368 amino acid (aa) extracellular domain (ECD) with four Ig-like C2-type domains, a 21 aa transmembrane segment, and a 107 aa cytoplasmic domain with three ITIM-like motifs. FCRL4 is closely related to FCγRIIB (2, 3) and shows high homology to Fc receptors (4). In cellular binding assays, FCRL4 bound to IgA efficiently (5). The FCRL4 gene is localized in the human chromosome 1q21-23 region, a hotspot for translocation events (3). The B cells expressing FCRL4 participate in the autoimmune response in rheumatoid arthritis patients (6).

References:

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2. Davis, R.S. *et al.* (2001) Proc. Natl. Acad. Sci. U. S. A. **98**:9772.
3. Hatzivassiliou, G. *et al.* (2001) Immunity **14**:277.
4. Amara, K. *et al.* (2007) J. Autoimmun. **81**:34.
5. Wilson, T.J. *et al.* (2012) J. Immunol. **188**:4741.
6. Miller, I. *et al.* (2002) Blood **99**:2662.

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