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FCRL3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19988b

Product Information

Application	WB, E
Primary Accession	Q96P31
Other Accession	NP_443171.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41960
Calculated MW	80856
Antigen Region	694-720

Additional Information

Gene ID	115352
Other Names	Fc receptor-like protein 3, FcR-like protein 3, FcRL3, Fc receptor homolog 3, FcRH3, IFGP family protein 3, hIFGP3, Immune receptor translocation-associated protein 3, SH2 domain-containing phosphatase anchor protein 2, CD307c, FCRL3, FCRH3, IFGP3, IRTA3, SPAP2
Target/Specificity	This FCRL3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 694-720 amino acids from the C-terminal region of human FCRL3.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FCRL3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FCRL3 (HGNC:18506)
Function	Promotes TLR9-induced B-cell proliferation, activation and survival but

	inhibits antibody production and suppresses plasma cell differentiation. Enhances activation of NF-kappa-B and MAPK signaling pathways in TLR9 stimulated B-cells (PubMed:23857366). Has inhibitory potentional on B-cell receptor (BCR)-mediated signaling, possibly through association with SH2 domain-containing phosphatases. Inhibits cell tyrosine phosphorylation, calcium mobilization and activation- induced cell death induced through BCR signaling (PubMed:19843936). Regulatory T-cells expressing FCRL3 exhibit a memory phenotype, are relatively nonresponsive to antigenic stimulation in presence of IL2 and have reduced capacity to suppress the proliferation of effector T- cells (PubMed:19494275, PubMed:20190142). Acts as a human-specific epitope on the cell surface of oocytes (oolemma) and plays a role during sperm-egg adhesion and fusion (PubMed:36070373). Interacts with the IZUMO1-IZUMO1R/JUNO sperm-egg complex and replaces IZUMO1R/JUNO as IZUMO1 receptor during fertilization, thereby permitting species- specific gamete fusion (PubMed:36070373).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Cell projection, microvillus membrane. Note=Localized along the oolemma microvilli of unfertilized oocytes
Tissue Location	Primarily expressed in secondary lymphoid tissues by mature subsets of B-cells. Low expression on transitional B cells which increases to higher surface expression on mature and memory B- cells with innate-like features (at protein level) (PubMed:23857366) Expressed a low levels in naive and germinal center B-cells but also expressed in NK cells (at protein level) (PubMed:20190142). Expressed in unfertilized oocytes (at protein level) (PubMed:36070373). Expressed in a population of thymically derived naturally occurring regulatory T- cells that exhibits a memory phenotype, specialized in suppressing immune response to self-antigens (PubMed:20190142). Detected in spleen, lymph node, peripheral blood lymphocytes, thymus, bone marrow, kidney, salivary gland, adrenal gland and uterus.

Background

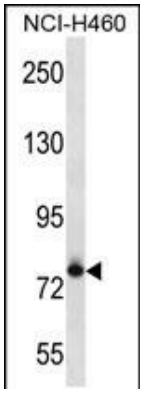
This gene encodes a member of the immunoglobulin receptor superfamily and is one of several Fc receptor-like glycoproteins clustered on the long arm of chromosome 1. The encoded protein contains immunoreceptor-tyrosine activation motifs and immunoreceptor-tyrosine inhibitory motifs in its cytoplasmic domain and may play a role in regulation of the immune system. Mutations in this gene have been associated with rheumatoid arthritis, autoimmune thyroid disease, and systemic lupus erythematosus.

References

Wu, H., et al. Hum. Immunol. (2010) In press :
Swainson, L.A., et al. J. Immunol. 184(7):3639-3647(2010)
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Zheng, R., et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi 26(6):681-685(2009)
Gibson, A.W., et al. Arthritis Rheum. 60(11):3510-3512(2009)

Images

FCRL3 Antibody (C-term) (Cat. #AP19988b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the FCRL3 antibody detected the FCRL3 protein (arrow).



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