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FCRL3 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP19988b

Specification

FCRL3 Blocking Peptide (C-term) - Product Information

Primary Accession	Q96P31
Other Accession	NP_443171.2

FCRL3 Blocking Peptide (C-term) - 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
The synthetic peptide sequence is selected from aa 709-720 of HUMAN FCRL3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FCRL3 Blocking Peptide (C-term) - 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:<a href="http://www.uniprot.org/citations/20190142"

target="_blank">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.

FCRL3 Blocking Peptide (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

FCRL3 Blocking Peptide (C-term) - Images

FCRL3 Blocking Peptide (C-term) - 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.

FCRL3 Blocking Peptide (C-term) - 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)