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FCER2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1490a

Product Information

Application	FC, E
Primary Accession	P06734
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	5B5
Isotype	IgG1
Calculated MW	36469
Description	The human leukocyte differentiation antigen CD23 (FCE2) is a key molecule for B-cell activation and growth. It is the low-affinity receptor for IgE. The truncated molecule can be secreted, then functioning as a potent mitogenic growth factor.(supplied by OMIM) . It is expressed on most mature, conventional B cells (but not on peritoneal CD5+ B cells), and can also be found on the surface of T cells, macrophages, platelets and EBV transformed B lymphoblasts. Expression of CD23 has been detected in neoplastic cells from cases of B cell chronic Lymphocytic leukemia. CD23 is expressed by B cells in the follicular mantle but not by proliferating germinal centre cells. CD23 is also expressed by eosinophils. CD23 is distinct from the high affinity IgE receptors found on basophils and mast cells, which mediate allergic reactions. The low affinity receptors are thought to play a role in isotype specific immunoregulation. The regulation of CD23 surface expression appears to be integral with the complex IgE system, which involves interactions of cells, cytokines, antibodies and regulatory factors. CD23 has been described as a “membrane bound cytokine,"in that the soluble cleavage products of CD23 are themselves able to act as cytokines in vitro.
Immunogen	Purified recombinant fragment of human FCER2 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	2208
Other Names	Low affinity immunoglobulin epsilon Fc receptor, BLAST-2, C-type lectin domain family 4 member J, Fc-epsilon-RII, Immunoglobulin E-binding factor, Lymphocyte IgE receptor, CD23, Low affinity immunoglobulin epsilon Fc receptor membrane-bound form, Low affinity immunoglobulin epsilon Fc receptor soluble form, FCER2, CD23A, CLEC4J, FCE2, IGEBF
Dilution	FC~~1/200 - 1/400 E~~N/A

Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FCER2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FCER2
Synonyms	CD23A, CLEC4J, FCE2, IGEBF
Function	Low-affinity receptor for immunoglobulin E (IgE) and CR2/CD21. Has essential roles in the regulation of IgE production and in the differentiation of B cells. On B cells, initiates IgE-dependent antigen uptake and presentation to T cells (PubMed:2167225). On macrophages, upon IgE binding and antigen cross-linking induces intracellular killing of parasites through activation of L-Arginine- nitric oxide pathway (PubMed:7544003).
Cellular Location	Cell membrane; Single-pass type II membrane protein. Cell membrane; Lipid-anchor. Secreted. Note=Also exists as a soluble excreted form, sCD23
Tissue Location	Detected in urine (at protein level).

References

1. J Cutan Pathol. 2009 Feb;36(2):206-10. 2. Environ Mol Mutagen. 2009 May;50(4):285-90.

Images

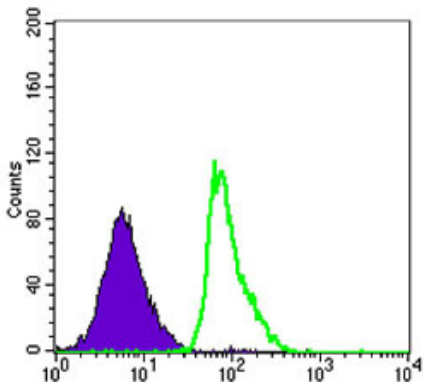

Figure 1: Flow cytometric analysis of Raji cells using FCER2 mouse mAb (green) and negative control (purple).