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FCER1G Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19903b

Product Information

Application	WB, IHC-P, E
Primary Accession	P30273
Other Accession	P20411, Q9XSZ6, P20491, Q8SPW1, Q9BDR7, NP_004097.1
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Monkey, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41735
Calculated MW	9667
Antigen Region	60-86

Additional Information

Gene ID	2207
Other Names	High affinity immunoglobulin epsilon receptor subunit gamma, Fc receptor gamma-chain, FcRgamma, Fc-epsilon RI-gamma, IgE Fc receptor subunit gamma, FceRI gamma, FCER1G
Target/Specificity	This FCER1G antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 60-86 amino acids from the C-terminal region of human FCER1G.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	FCER1G Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FCER1G
Function	Adapter protein containing an immunoreceptor tyrosine-based activation

motif (ITAM) that transduces activation signals from various immunoreceptors. As a component of the high-affinity immunoglobulin E (IgE) receptor, mediates allergic inflammatory signaling in mast cells. As a constitutive component of interleukin-3 receptor complex, selectively mediates interleukin 4/IL4 production by basophils, priming T-cells toward effector T-helper 2 subset. Associates with pattern recognition receptors CLEC4D and CLEC4E to form a functional signaling complex in myeloid cells. Binding of mycobacterial trehalose 6,6'- dimycolate (TDM) to this receptor complex leads to phosphorylation of ITAM, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen- specific priming of T-cells toward effector T-helper 1 and T-helper 17 cell subtypes. May function cooperatively with other activating receptors. Functionally linked to integrin beta-2/ITGB2-mediated neutrophil activation. Also involved in integrin alpha-2/ITGA2-mediated platelet activation.

Cellular Location Cell membrane; Single-pass type I membrane protein

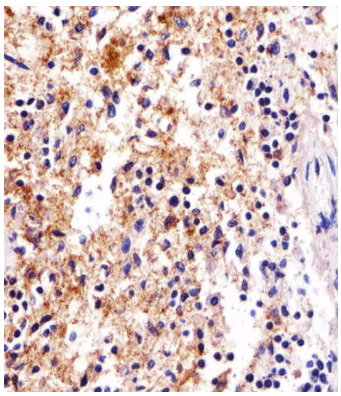
Background

The high affinity IgE receptor is a key molecule involved in allergic reactions. It is a tetramer composed of 1 alpha, 1 beta, and 2 gamma chains. The gamma chains are also subunits of other Fc receptors.

References

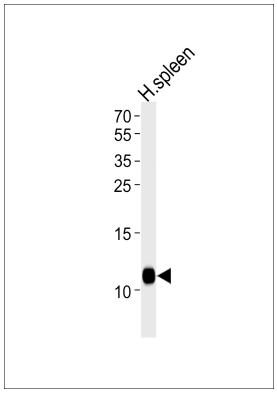
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Han, S., et al. Hum. Immunol. 71(7):727-730(2010)
Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1356-1361(2010)
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Untersmayr, E., et al. PLoS ONE 5 (2), E9023 (2010) :

Images



Immunohistochemical analysis of paraffin-embedded H. spleen section using FCER1G Antibody (C-term)(Cat#AP19903b). AP19903b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Western blot analysis of lysate from human spleen tissue lysate, using FCER1G Antibody (C-term)(Cat. #AP19903b). AP19903b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.