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Fc epsilon Receptor I alpha (FceR1) Mouse Anti-Human mAb (clone AER-37), APC Conjugate

Store at 2°C to 8°C

Pub. No. MAN0009549 **Rev.** 1.00

Catalog No.	Form	Amount	Excitation	Peak Emission
A18446	APC	25 tests (5 µL/test; 0.025 µg/µL)	650 nm	660 nm

Clone	AER-37 (CRA1)
Host/Class	Mouse IgG2bκ
Description	The Fc epsilon Receptor I alpha (FceR1) Mouse Anti-Human Monoclonal Antibody (mAb) recognizes the Fc epsilon Receptor I alpha subunit. This IgE-binding subunit lacks signal-transducing ability. Fc epsilon Receptor I alpha expression is found on basophil and mast cells. Expression is up-regulated by the presence of IgE. Together with one beta and two gamma subunits, Fc epsilon RI alpha forms a tetrameric complex. The beta and gamma subunits of the tetramer contain immunoreceptor tyrosine-based activation motifs.
Alternate Names	FceRI alpha, high affinity IgE receptor
Applications*	FC (normal human peripheral blood cells)[3], FUNC[1]
Storage Buffer	The reagent is provided in aqueous buffer with 0.09% sodium azide, and may contain carrier protein/stabilizer. **CAUTION!** Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at www.lifetechnologies.com/support.
Storage	Store reagents in the dark at 2° to 8°C. Do not freeze. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted. Avoid prolonged light exposure with fluorochrome-conjugated antibodies. Use dim light during handling, incubation with cells, and prior to analysis.
Stability	When stored as instructed, expires one year from date of receipt unless otherwise indicated on Certificate of Analysis.
Lot Number	See product label.
References	1. Suzukawa M, Hirai K, Iikura M, Nagase H, Komiya A, Yoshimura-Uchiyama C, Yamada H, Ra C, Ohta K, et. al. IgE- and FcepsilonRI-mediated migration of human basophils. *Int Immunol*. 2005 Sep;17(9):1249-55. 2. Hasegawa M, Nishiyama C, Nishiyama M, Akizawa Y, Takahashi K, Ito T, Furukawa S, Ra C, Okumura K, Ogawa H. Regulation of the human Fc(epsilon)RI alpha-chain distal promoter. *J Immunol* 2003. 170(7):3732-8. 3. Yamaguchi M, et. al. IgE enhances Fc epsilon receptor I expression and IgE-dependent release of histamine and lipid mediators from human umbilical cord blood-derived mast cells: synergistic effect of IL-4 and IgE on human mast cell Fc epsilon receptor I expression and mediator release. *J Immunol*. 1999 May 1;162(9):5455-65. 4. Hasegawa S, Pawankar R, Suzuki K, Nakahata T, Furukawa S, Okumura K, Ra C. Functional expression of the high affinity receptor for IgE (FcepsilonRI) in human platelets and its' intracellular expression in human megakaryocytes. *Blood* 1999. 93(8):2543-51. 5. Ra C, Kuromitsu S, Hirose T, Yasuda S, Furuichi K, Okumura K. Soluble human high-affinity receptor for IgE abrogates the IgE-mediated allergic reaction. *Int Immunol*. 1993 Jan;5(1):47-54. 6. Hakimi J., C. Seals, J. A. Kondas, L. Pettine, W. Danho, J. Kochan. The Alpha Subunit of the Human IgG Receptor (FceRI) is Sufficient for High-Affinity IgE Binding. *J Biol Chem* 1990. 265(36):22079-81.

* Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

FC = flow cytometry; FUNC = functional assay; ICC = immunocytochemistry; IHC(F) = immunohistochemistry (frozen sample); IHC(P) = immunohistochemistry (paraffin embedded sample); IP = immunoprecipitation; RIA = radioimmunoassay; WB = western blot

Manufacturing site: 7335 Executive Way | Frederick, MD 21704 | Toll Free in USA 800.955.6288

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

Important Licensing Information

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