

DESCRIPTION

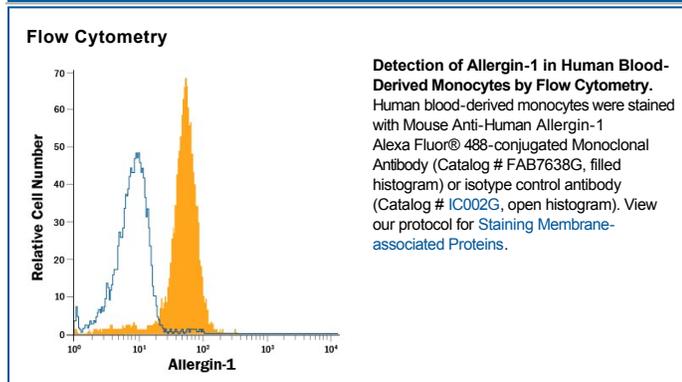
Species Reactivity	Human
Specificity	Detects human Allergin-1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 767727
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Allergin-1 Met1-Lys227 Accession # Q7Z6M3
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	5 µL/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Allergin-1, also known as MCA32 and c17orf60 is a 70-72 kDa member of the Ig Superfamily. It is expressed on mast cells, basophils, neutrophils, dendritic cells, B cells and monocytes, and is reported to negatively regulate allergic mediator release from mast cells. In particular, MCA32 interacts with FcεRI. Upon IgE mediated FcεRI aggregation and activation, Allergin-1 recruits Tyr phosphatases to a FcεRI tetrameric complex, dampening IgE receptor downstream signaling and abrogating mast cell degranulation. Mature human Allergin-1 is a monomeric type I transmembrane glycoprotein that is 324 amino acids (aa) in length. It contains two C2-type Ig domains (aa 35-118 and 123-217) in the extracellular region (aa 20-227), plus a 95 aa cytoplasmic domain that possesses two ITIM motifs. Two 40-42 kDa splice variants exist that show deletions of one of the two Ig-like domains. One isoform termed Allergin-1S1 is missing aa 123-217, while a second isoform called Allergin-1S2 is missing aa 33-122. It would appear that mouse Allergin-1 exists in two forms; a soluble form lacking the TM segment, and a TM form that is analogous to the human 1S1 isoform (no two Ig-like domain-containing isoform exists). Within this context (aa 20-122 plus aa 218-227 in human), human and mouse share 48% aa sequence identity.

PRODUCT SPECIFIC NOTICES

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