

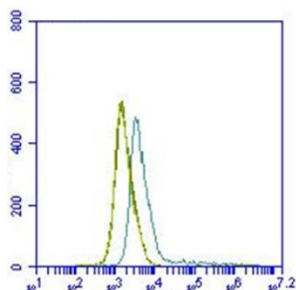
**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	Allergin-1, Mouse, clone TX83		
<b>Catalog number</b>	HM1143-20UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	200 µl	<b>Amount</b>	20 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #				2,3,4				
Yes				•				
No								
N.D.	•	•	•		•	•	•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



FC: Flow cytometry: detection of Allergin-1 in Wehi cells. green and blue lines represent the isotype control, cells only and HM1143 with a concentration of 5 µg/1100000 cells, respectively.

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

**General Information**

<b>Description</b>	<p>Monoclonal antibody clone Tx83 recognizes mouse allergy inhibitory receptor-1 (Allergin-1; also known as mast cell antigen AG-32). It is an immune regulatory molecule predominantly expressed on mast cells, but also found on other myeloid cells like macrophages, dendritic cells and neutrophils. The receptor consist of an immunoreceptor tyrosine-based inhibitory motif (ITIM) like domain. It's main function is to suppress IgE (FcεRI-) mediated degradation and TLR2-mediated signaling in mast cells. Thereby inhibiting production of cytokines and other inflammatory mediators. Allergin-1 is tyrosine phosphorylated and recruits SH2 phosphatases , such as SHP-1, SHP-2 or SHIP. Co-ligation with FcεRI decreases mast cell degranulation. Currently three isoforms of human allergin-1 are identified: allergin-1L, Allergin-1S1 &amp; allergin-1S2.</p> <p>Mast cells play a pivotal role in allergic reactions in barrier tissues, like skin and intestinal mucosa. Allergin-1 is suggested to play a role in skin diseases like dermatitis, the autoimmune diseases such as SLE and airway hyperresponsiveness. In macrophages it is suggested to play a role by suppressing autoantibody production via the promotion of apoptotic cell clearance.</p>
<b>Immunogen</b>	TX83 was generated by immunizing Allergin-1-deficient mice with BW5147 transfectants expressing Flag-tagged Allergin-1 (Ref.1).
<b>References</b>	1. Hitomi, K et al; A novel immunoglobulin-like receptor, Allergin-1, inhibits immunoglobulin E-mediated immediate hypersensitivity reactions. Nat. Immunol. 11:601.

2. Tsurusaki, S et al; Allergin-1 inhibits TLR2-mediated mast cell activation and suppresses dermatitis. *Int Immunol*. 2016, *28*:605.
3. Hitomi, K et al; Allergin-1 on mast cells suppresses house dust mite-induced airway hyperresponsiveness in mice. *Int Immunol* 2018.
4. Iizuka, A et al; Allergy inhibitory receptor-1 inhibits autoantibody production via upregulation of apoptotic debris clearance by macrophages. *Rheum Dis* 2018, *21*:2071.

**Storage&stability** Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions** For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
13/11/2020

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).