

# FCER1A Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant FCER1A. Catalog # AT2024a

### **Product Information**

**Application** WB, E **Primary Accession** P12319 **Other Accession** BC005912 Reactivity Human Host mouse Clonality monoclonal Isotype IgG1 Kappa **Clone Names** 2C12-3B6 Calculated MW 29596

#### **Additional Information**

**Gene ID** 2205

Other Names High affinity immunoglobulin epsilon receptor subunit alpha, Fc-epsilon

RI-alpha, FcERI, IgE Fc receptor subunit alpha, FCER1A, FCE1A

**Target/Specificity** FCER1A (AAH05912.1, 1 a.a. ~ 257 a.a) full-length recombinant protein with

GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000 E~~N/A

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2.

**Storage** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** FCER1A Antibody (monoclonal) (M01) is for research use only and not for use

in diagnostic or therapeutic procedures.

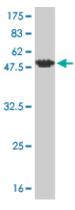
## **Background**

The IgE receptor plays a central role in allergic disease, coupling allergen and mast cell to initiate the inflammatory and immediate hypersensitivity responses that are characteristic of disorders such as hay fever and asthma. The allergic response occurs when 2 or more high-affinity IgE receptors are crosslinked via IgE molecules that in turn are bound to an allergen (antigen) molecule. A perturbation occurs that brings about the release of histamine and proteases from the granules in the cytoplasm of the mast cell and leads to the synthesis of prostaglandins and leukotrienes--potent effectors of the hypersensitivity response. The IgE receptor consists of 3 subunits: alpha, beta (MIM 147138), and gamma (MIM 147139); only the alpha subunit is glycosylated.

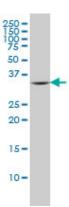
### References

Single nucleotide polymorphisms in inflammation-related genes are associated with venous thromboembolism. Beckers MM, et al. Eur J Intern Med, 2010 Aug. PMID 20603037. Prolonged culture of mast cells with high-glucose medium enhances the Fc epsilon RI-mediated degranulation response and leukotriene C4 production. Kitahata Y, et al. Int Arch Allergy Immunol, 2010. PMID 20523060. Interleukin-9 polymorphism in infants with respiratory syncytial virus infection: an opposite effect in boys and girls. Schuurhof A, et al. Pediatr Pulmonol, 2010 Jun. PMID 20503287. Polymorphisms in innate immunity genes and risk of childhood leukemia. Han S, et al. Hum Immunol, 2010 Jul. PMID 20438785. Counterregulation between the FcepsilonRI pathway and antiviral responses in human plasmacytoid dendritic cells. Gill MA, et al. J Immunol, 2010 Jun 1. PMID 20410486.

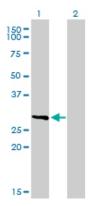
### **Images**



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (54.01 KDa).



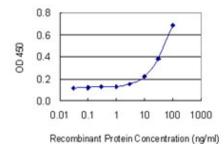
FCER1A monoclonal antibody (M01), clone 2C12-3B6 Western Blot analysis of FCER1A expression in A-549 ( (Cat # AT2024a )

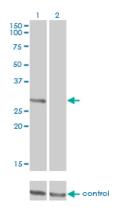


Western Blot analysis of FCER1A expression in transfected 293T cell line by FCER1A monoclonal antibody (M01), clone 2C12-3B6.

Lane 1: FCER1A transfected lysate(29.6 KDa). Lane 2: Non-transfected lysate.

Detection limit for recombinant GST tagged FCER1A is 1 ng/ml as a capture antibody.





Western blot analysis of FCER1A over-expressed 293 cell line, cotransfected with FCER1A Validated Chimera RNAi ( (Cat # AT2024a)

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