Monoclonal Anti-human IgE

Product reference: DDX0290

Description:

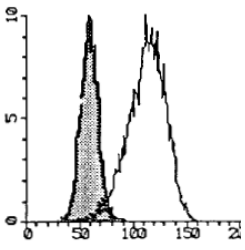
Cell surface receptors for the Fc fragments of IgE (FcεR) have been identified on a variety of cell types from hematopoietic origin. The low affinity receptor for IgE (CD23) has been described as a B cell-activation marker. IgE-binding factors have been shown to play a major role in the regulation of IgE production. Basophils and mast cells express FcεR1, which bind IgE with high affinity and the reaction of allergen with cell-bound IgE induces the release of a variety of pharmacologically active mediators that are responsible for the clinical manifestations of allergic disorders. mAb27 was generated from a mouse immunization program aiming at producing mAb specific for human IgE-Fc in order to map the sites on IgE interacting with receptors on target cells. *(Chrétien I. et al, J. Immunol, 1988, (9) 141, pp3128-34).*

Clone:	**I27**
Species:	mouse
Specificity:	Human IgE (heat labile epitope in N-terminal of CH3 domain)
Immunogen:	purified human IgE (preincubated with mouse serum anti human IgG)
Species cross-reactivity:	nd
Cross –reactivity:	does not react with human IgG, IgA, IgM
Isotype:	IgG1
Formulation/size:	**Purified**: 100 µg in 200 µl Tris-NaCl pH 8 **Coupled**: 100 µg in 200 µl PBS 50% glycerol
Available formats:	*Coupled format available on request*

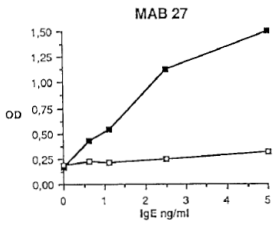
Reference		Format	Application tested
50µg	100µg		
DDX0290P-50	DDX0290P-100	purified	Flow cytometry, basophil degranulation, blocking IgE binding to $(FcεR3/CD23)^+$ cells, Western-Blot

Other clones available on request

Chrétien I et al, J Immunol, 1988



Fixation of mAb27 to IgE bound to FcεR2/CD23 on RPMI 8866 cells



Binding of mAb27 to IgE (open) and heat denatured IgE (closed) in a sandwich ELISA

mAb Concentration (µg/ml)	mAb Control	mAb 27
0	3	3
0,5	ND	60
4	ND	30
8	2.5	7.8

Induction of basophil degranulation by mAb27 (histamine nM)

Antibody	Binding to IgE	Binding to Heat-Denatured IgE	Binding to IgE on FcεR2/CD23	Inhibition of IgE Binding to FcεR2/CD23	Basophil Degranulation
mAb 27	+	–	+	+	+

Usage recommendation:

*****This monoclonal antibody may be used between 1-10 µg/ml.
*Optimal dilution should be determined by each laboratory for each application.
*Coupled antibody: to maintain RT before use.

Aliquot storage conditions:

-20°C. KEEP CONTENTS STERILE: no preservative.
<u>Purified</u> antibodies: avoid repeated freeze/thaw cycles.
<u>Coupled</u> antibodies: glycerol protects from freezing.

Not for use in Humans. For research purpose only

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