



## Anti-Fc $\epsilon$ R1 $\alpha$ (human IgE receptor), FITC-labeled IgG

### BACKGROUND

Fc $\epsilon$ R1 $\alpha$  is subunit of the high affinity receptor of IgE to which it directly binds. Fc $\epsilon$ R1 $\alpha$  is a tetrameric complex consisting of one  $\alpha$ , one  $\beta$  and two  $\gamma$  subunits. The latter two are required for signal transduction activity. The Fc $\epsilon$ R1 complex plays an important role in triggering allergic responses.

The CRA2 (AER24) monoclonal antibody reacts with the Fc $\epsilon$ R1 $\alpha$  subunit on a region that overlaps the region of the IgE binding site, thus it competes with IgE for the receptor binding. Since the CRA1 (AER37) monoclonal antibody reacts with the site different from the IgE binding site on Fc $\epsilon$ R1 $\alpha$ , it does not compete with IgE for the receptor binding. Combining the two antibodies, one can quantitatively measure the amounts of the IgE-bound Fc $\epsilon$ R1 $\alpha$ .

The IgG fraction is purified from serum free culture medium of mouse hybridoma (CRA2) by propriety chromatography under mild conditions.

This product is an FITC-labeled IgG ([FITC]/[IgG] = 8.9) produced from the IgG fraction. It is reported that CRA2 recognizes 85-172 (domain 2) amino acid domain of Fc $\epsilon$ R1 $\alpha$ <sup>(3)</sup>.

<b>Product type</b>	Primary antibodies
<b>Host</b>	Mouse
<b>Source</b>	Supernatant
<b>Form</b>	Liquid
	Purified monoclonal antibody (IgG) 1mg/ml in PBS (pH 7.4) 50% glycerol, sterile-filtered, azide-free
<b>Volume</b>	50 $\mu$ g
<b>Concentration</b>	1 mg/ml
<b>Specificity</b>	Fc $\epsilon$ R1 $\alpha$ (human IgE receptor)
<b>Antigen</b>	Fc $\epsilon$ R1 $\alpha$
<b>Clone</b>	CRA2
<b>Isotype</b>	IgG1 $\kappa$

**Application notes** FC, IHC, Titration of IgE-bound fraction of the Fc $\epsilon$ R1 $\alpha$  using CRA1 and CRA2 antibodies

### Recommended use

### Recommended dilutions

Optimal dilutions/concentrations should be determined by the end user.

### Staining Pattern

**Cross reactivity** Human

**Storage** -20°C ( for long period, -70°C)

**References** The usage of this antibody is reported in ref. 3.

1) Ra C et al., Nature 341: 752 (1989)

2) Hakimi J et al., J. Biol. Chem 265: 22079 (1990)

3) Takai T et al., Biosci. Biotechnol. Biochem. 64: 1856 (2000) (PubMed)

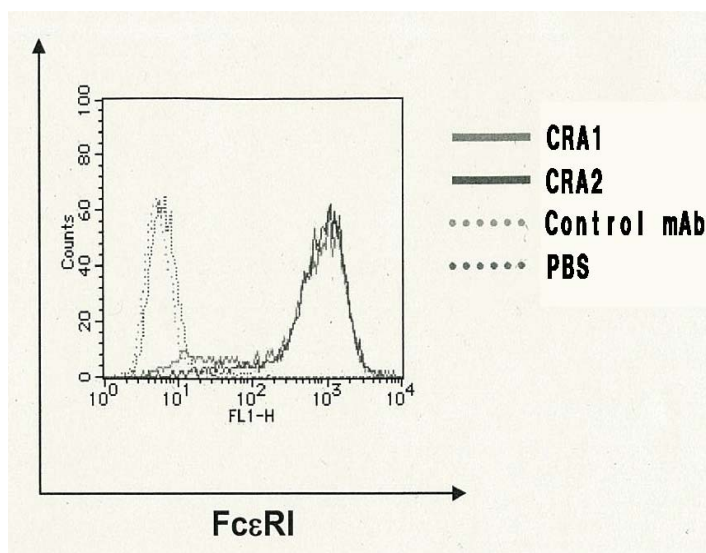


Fig. FACS analysis of CHO/αβγ cells (1x10<sup>5</sup>) with CRA1 and CRA2 antibodies by Indirect-immunostaining, using FITC-labeled secondary antibody.

**Related Products**

BAM-72-001-EX	(Clone: CRA1)	Anti-FcεR1α (human IgE receptor)
BAM-72-003-EX	(Clone: CRA1)	Anti-FcεR1α (human IgE receptor), Biotinylated IgG
BAM-72-004-EX	(Clone: CRA1)	Anti-FcεR1α (human IgE receptor), FITC-labeled IgG
BAM-72-005-EX	(Clone: CRA2)	Anti-FcεR1α (human IgE receptor)
BAM-72-007-EX	(Clone: CRA2)	Anti-FcεR1α (human IgE receptor), Biotinylated IgG

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