

## Anti-Fc $\varepsilon$ R1 $\alpha$ (human IgE receptor) monoclonal antibody (CRA2)

72-005 100ug

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  $\gamma$  subunis. 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  $\alpha$ .

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

## **Application**

1) Western blotting (~1ug/ml)

- 2) FACS
- 3) Immunohistochemistry
- 4) Titration of IgE-bound fraction of the Fc  $\epsilon$  R1  $\alpha$  using CRA1 and CRA2 antibodies **Form:** Purified monoclonal antibody (IgG) 1mg/ml in PBS (pH 7.4) 50% glycerol,, sterile-filtered, azide-free

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Storage: -20°C (long period,-70°C)

**References:** This product was described and used in reference 3.

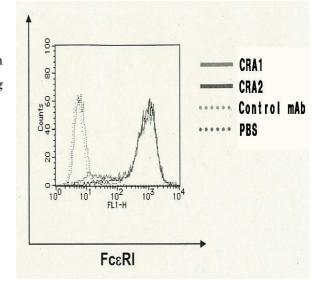
1.Ra C et al Nature 341:752 (1989)

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

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

**Figure:** FACS analysis of CHO/ $\alpha$   $\beta$   $\gamma$  cells (1x105) with CRA1 and CRA2 antibodies by indirect-immunostaining using FITC-labeled secondary antibody.

Related product: 72-005 Anti-Fc  $\epsilon$  R1  $\alpha$  (human) monoclonal antibody (CRA2)



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