

## Extracellular Fragment of Fc alpha Receptor I (CD89)

Human, CD89

Expressed in *E.Coli*

Cat. No. CBCRY06

Lot. No. (See product label)

### BACKGROUND

Human Fc $\alpha$ RI (CD89) is the receptor specific for IgA, an immunoglobulin that is abundant in mucosa and is also found in high concentrations in serum. Although Fc $\alpha$ RI is an immunoglobulin Fc receptor (FcR), it differs in many ways from FcRs for other immunoglobulin classes. The genes of most FcRs are located on chromosome 1 at 1q21-23, whereas Fc $\alpha$ RI is on chromosome 19, at 19q13.4, a region called the leukocyte receptor complex, because it is clustered with several leukocyte receptor families including killer cell inhibitory receptors (KIRs) and leukocyte Ig-like receptors (LIRs). The amino acid sequence of Fc $\alpha$ RI shares only 20% homology with other FcRs but it has around 35% homology with its neighboring LIRs and KIRs.

### MOLECULAR DESCRIPTION

**Protein classification:** Immune System

**Structure Weight:** 25006.40 Da

**Polymer:** 1

**Molecule:** Immunoglobulin alpha Fc receptor

**Chains:** A

**Type:** polypeptide (L)

**Chain Length:** 218 amino acids

### CRYSTAL INFORMATION

**PDB ID:** [1UCT](#)

**MMDB ID:** [24338](#)

**Source:** E.Coli

**Method:** X-Ray Diffraction

**Resolution:** 2.1 Å

### FOR RESEARCH USE ONLY

### CRYSTAL STRUCTURE



### GENE INFORMATION

**Gene Name:** [FCAR](#)

**Synonyms:** XXbac-BPG230H20.5, CD89; Fc alpha receptor; IgA Fc receptor; OTTHUMP00000068692; OTTHUMP00000068696; OTTHUMP00000068697; OTTHUMP00000068698; CD89; CD89 antigen; Fc receptor; Fc fragment of IgA, receptor; IgA Fc receptor; Immunoglobulin alpha Fc receptor

**UniProt ID:** [P24071](#)

**GeneID:** [2204](#)

**Chromosome Location:** 19q13.2-q13.4

**Function:** IgA binding; receptor activity

### PRIMARY CITATION

Ding, Y., Xu, G., Yang, M., Yao, M., Gao, G.F., Zhang, W., Rao, Z. Crystal Structure of the Ectodomain of Human Fc{alpha}RI. *J.Biol.Chem.* 2003; 278: 27966-27970