

# Recombinant human Fc gamma RIIA/CD32a (R167) protein

Catalog Number: ATGP4163

## PRODUCT INFORMATION

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### Expression system

HEK293

### Domain

30-218aa

### UniProt No.

P12318

### NCBI Accession No.

AAA35827.1

### Alternative Names

Low affinity immunoglobulin gamma Fc region receptor II-a, IgG Fc receptor II-a, IgG Fc fragment receptor, CDw32, Fc-gamma RII-a, Fcgamma-RIIa, FcRII-a, CD32, FCGR2A, FCG2, FCGR2A1, IGFR2, CD32a, FCG2A

## PRODUCT SPECIFICATION

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### Molecular Weight

21.7kDa (195aa)

### Concentration

1mg/ml (determined by Absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured by its binding ability in a functional ELISA with Human IgG (CAT# ATGP4094).

### Tag

His-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant human Fc gamma RIIA/CD32a (R167) protein

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## Description

Fc gamma RIIA/CD32a, also known as Low affinity immunoglobulin gamma Fc region receptor II-a, is a member of the Ig superfamily that function in the activation or inhibition of immune responses. CD32 is expressed on many immune cell types - notably, CD32a is found on platelets, neutrophils, macrophages, and dendritic cells. CD32 has a low-affinity for the Fc region of IgG antibodies in monomeric form, but high affinity for IgG immune complexes. Besides IgG, it also binds C-reactive protein (CRP). Two allelic variants of CD32a, that differ in their ability to ligate human IgG2 or CRP exist. CD32 has two major functions: cellular response regulation, and the uptake of immune complexes. Cellular responses regulated by CD32 include phagocytosis, cytokine stimulation, and endocytic transport. Dysregulated CD32 is associated with different forms of autoimmunity, including systemic lupus erythematosus. Recombinant human Fc gamma RIIA/CD32a, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

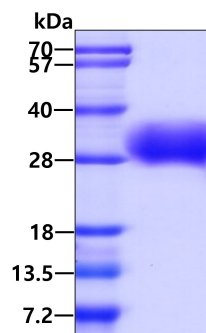
SADSQAAAPP KAVLKLEPPW INVLQEDSVT LTCQGARSPE SDSIQWFHNG NLIPHTHTQPS YRFKANNNDS GEYTCQTGQT  
SLSDPVHLTV LSEWLVLQTP HLEFQEGETI MLRCHSWKDK PLVKVTFQFN GKSQKFSRLD PTFSIPQANH SHSGDYHCTG  
NIGYTLFSSK PVTITVQVPS MGSSSPMGI<H HHHHH>

## General References

Ravetch, J.V. and S. Bolland (2001) *Annu. Rev. Immunol.* 19:275-290.  
Chi, M., et al. (2002) *J. Immunol.* 168:3697-3701.  
Zuniga. R., et al. (2003) *Arthritis Rheum.* 48:460.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

## Biological Activity

# Recombinant human Fc gamma RIIA/CD32a (R167) protein

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Human Fc gamma RIIA/CD32a (R167) is coated at 10 ug/ml (100 ul/well) can bind Human IgG (CAT# ATGP4094) in a Functional ELISA assay.

