

Recombinant human Fc gamma RIIA/CD32a (R167H) protein

Catalog Number: ATGP4116

PRODUCT INFORMATION

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, CDw32 Fc-gamma RII-a, Fc-gamma-RIIa, FcRII-a, CD32, FCGR2A, FCG2, FCGR2A1, IGFR2, CD32a, FCG2A

PRODUCT SPECIFICATION

Molecular Weight

21.6kDa (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 IgG1 Fc (CAT# ATGP4094). The ED50 range \leq 5 ug/ml.

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.

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BACKGROUND

Description

Fc gamma RIIA/CD32a, also known as Low affinity immunoglobulin gamma Fc region receptor II-a, are members of the Ig superfamily that function in the activation or inhibition of immune responses. Fc gamma RIIA is expressed on many immune cell types where inhibitory ITIM-bearing receptors may also be co-expressed and co-engaged by specific ligands. Signaling through Fc gamma RIIA results in the initiation of inflammatory responses that can be modulated by signals from the inhibitory receptors. The strength of the signal is dependent on the ratio of expression of the activating and inhibitory receptors. Besides IC, Fc gamma RII A also binds C-reactive protein (CRP) Two allelic variants of Fc gamma RIIA that differ in their ability to ligate human IgG2 or CRP exist. The R167H allele has been found to have a protective effect against lupus nephritis. 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

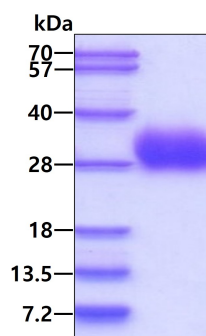
SADSQAAAPP KAVLKLEPPW INVLQEDSVT LTCQGARSPE SDSIQWFHNG NLIPTHTQPS YRFKANNNDS GEYTCQTGQT
SLSDPVHLTV LSEWLVLQTP HLEFQEGETI MLRCHSWKDK PLVKVTFQON GKSQKFSHLD PTFSIPQANH SHSGDYHCTG
NIGYTLFSSK PVTITVQVPS MGSSSPMGI<H HHHHH>

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 (R167H) protein

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Human IgG1 Fc (CAT# ATGP4094) is coated at 1 ug/ml (100 ul/well) can bind Human Fc gamma RIIA/CD32a (H167). The ED50 range ≤ 5 ug/ml.

