

Datasheet for ABIN2181081

**FcRn Protein (AA 24-297) (His tag,Strep Tag)**[Go to Product page](#)[2 Images](#)[3 Publications](#)

## Overview

Quantity:	50 µg
Target:	FcRn
Protein Characteristics:	AA 24-297
Origin:	Cynomolgus, Rhesus Monkey
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This FcRn protein is labelled with His tag,Strep Tag.

## Product Details

Brand:	MABSol®
Sequence:	AA 24-297
Characteristics:	Cynomolgus / Rhesus macaque FcRn / FCGRT & B2M Heterodimer Protein, produced by co-expression of FCGRT and B2M, has a calculated MW of 31.3 kDa (FCGRT) and 13.1 kDa (B2M). Subunit FCGRT is fused with his-tag at the C-terminus and subunit Beta-2 microglobulin (B2M) is fused with Strep II-tag at the C-terminus. The predicted N-terminus is Ala 24 (FCGRT) & Ile 21(B2M). The reducing (R) protein migrates as 33 kDa (FCGRT) and 13 kDa (B2M) respectively due to glycosylation. Cynomolgus and Rhesus macaque FcRn / FCGRT & B2M sequences are identical.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered

## Product Details

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Endotoxin Level: Less than 1.0 EU per µg by the LAL method.

## Target Details

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Target: FcRn

Alternative Name: FcRn ([FcRn Products](#))

Background: FCGRT & B2M heterodimer protein (FcRn complex) consist of two subunits: p51 (equivalent to FCGRT), and p14 (equivalent to beta-2-microglobulin), and forms an MHC class I-like heterodimer. Fc fragment of IgG, receptor, transporter, alpha (FCGRT) binds to the Fc region of monomeric immunoglobulins gamma and mediates the uptake of IgG from milk. FCGRT possible role in transfer of immunoglobulin G from mother to fetus. Beta-2-microglobulin (B2M) is a component of the class I major histocompatibility complex (MHC) and involved in the presentation of peptide antigens to the immune system.

Molecular Weight: 32.3 kDa (FCGRT), 13.1 kDa (B2M)

Pathways: [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#)

## Application Details

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Buffer: PBS, pH 7.4

Handling Advice: Please avoid repeated freeze-thaw cycles.

Storage: -20 °C

Storage Comment: No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C), After reconstitution under sterile conditions for 3 months (-70 °C).

## Publications

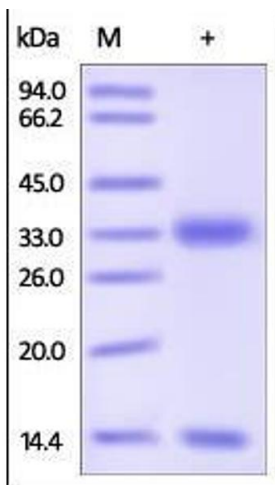
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Product cited in: Kisalu, Pereira, Ernste, Flores-Garcia, Idris, Asokan, Dillon, MacDonald, Shi, Chen, Pegu, Schön, Zavala, Balazs, Francica, Seder: "Enhancing durability of CIS43 monoclonal antibody by Fc mutation or AAV delivery for malaria prevention." in: **JCI insight**, Vol. 6, Issue 3, (2021) ([PubMed](#)).

Asokan, Dias, Liu, Maximova, Ernste, Pegu, McKee, Shi, Chen, Almasri, Promsote, Ambrozak, Gama, Hu, Douek, Todd, Lifson, Fourati, Sekaly, Crowley, Ackerman, Ko, Kilam, Boritz, Liao, Best, Perelson et al.: "Fc-mediated effector function contributes to the in vivo antiviral effect of an HIV neutralizing antibody. ..." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 117, Issue 31, pp. 18754-18763, (2020) ([PubMed](#)).

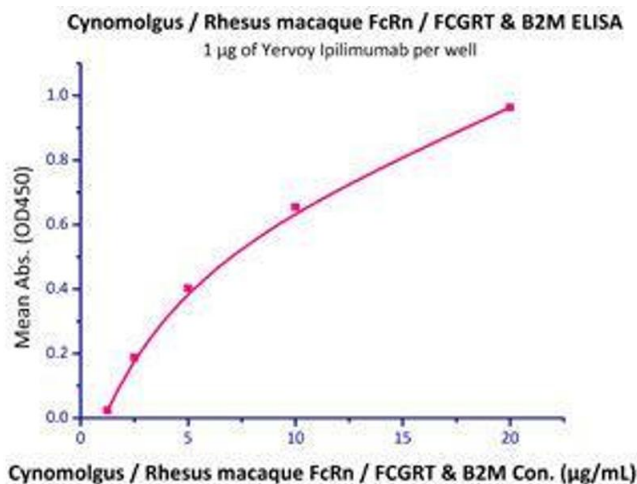
Kenniston, Taylor, Conley, Cosic, Kopacz, Lindberg, Comeau, Atkins, Bullen, TenHoor, Adelman, Sexton, Edwards, Nixon: "Structural basis for pH-insensitive inhibition of immunoglobulin G recycling by an anti-neonatal Fc receptor antibody." in: **The Journal of biological chemistry**, Vol. 292, Issue 42, pp. 17449-17460, (2017) ([PubMed](#)).

Images



**SDS-PAGE**

**Image 1.** Cynomolgus / Rhesus macaque FcRn / FCGRT & B2M on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.



**Binding Studies**

**Image 2.** Immobilized Yervoy Ipilimumab at 10 µg/mL (100 µl/well), can bind Cynomolgus / Rhesus macaque FcRn / FCGRT & B2M (Cat# FCM-C5284) with a linear range of 1.25-10 µg/mL.