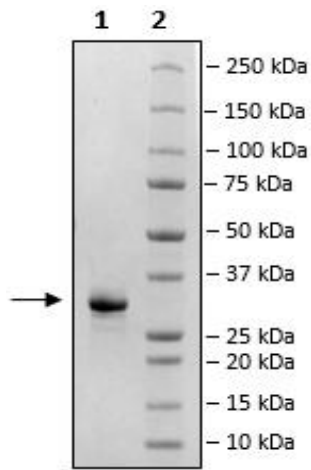


## Product Information

<b>Description:</b>	The FcRn (FCGRT/B2M) Blocker (Fc-Tag) is a recombinant human protein corresponding to the Fc region of an antibody which has been engineered to bind to the human neonatal Fc Receptor of IgG (FcRn; FCGRT/B2M) with high affinity. This protein has been tested for specific binding to human FcRn (BPS Bioscience #71283) and it blocks the binding of FcRn to IgG. The FcRn blocker is comparable to Efgartigimod alfa-fcab. This protein was affinity purified.
<b>Background:</b>	Neonatal Fc receptor for IgG (FcRn) is a heterodimeric protein consisting of the Fc Gamma Receptor and Transporter encoded by the FCGRT gene, associated with beta-2-Microglobulin (B2M). FcRn binds to the Fc region of monomeric immunoglobulin G (IgG). FcRn contributes to an effective humoral immunity by protecting IgGs from degradation, recycling them and extending their half-life in circulation. In addition to IgGs, it regulates the homeostasis of serum albumin. The loss of FcRn in tumor cells has been reported to play a role in cancer by increasing the breakdown of albumin to amino acids needed by tumor cells for proliferation. -The function of FcRn can be exploited by engineering therapeutic antibodies to increase their binding to FcRn, thereby improving their half-life and therapeutic efficacy. For example, an antibody cocktail that contains Fc mutations and an extended half-life (Evusheld) is used to treat COVID-19. There are now several other drugs in clinical using similar strategies.
<b>Species:</b>	Human
<b>Concentration:</b>	0.77 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	26 kDa + glycans
<b>Glycosylation:</b>	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
<b>Stability:</b>	At least 12 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Assay Conditions:</b>	Assay was done according to Fc (IgG1): FcRn Inhibitor Screening Colorimetric Assay Kit (BPS Bioscience #78501).
<b>Applications:</b>	Useful for FcRn binding assays and blocking FcRn binding to IgG.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### Fc(IgG1):FcRn-Biotin Interaction

