SmartEnzymes™

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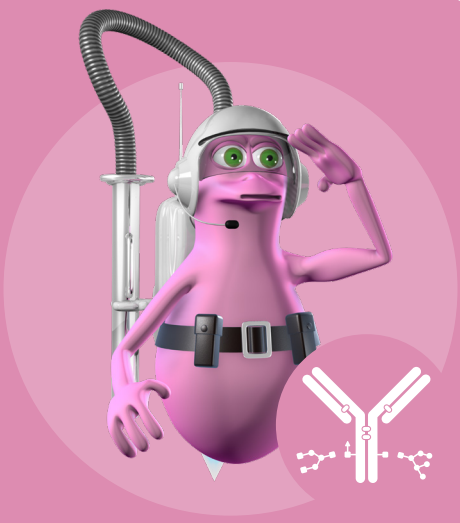

IgGZERO®

Lyophilized

STORE AT
-20°C

FOR RESEARCH USE ONLY

Instructions for Use

IgGZERO® Lyophilized 1000 units (A0-IZ1-010)
Process 1 mg IgG

IgGZERO® Lyophilized 5000 units (A0-IZ1-050)
Process 5 mg IgG

IgGZERO® Low Endotoxin 2000 units (A0-IZ8-020)
Process 2 mg IgG

DOWNLOAD INSTRUCTIONS FOR USE
www.genovis.com/ifu-A0-IZ1

www.genovis.com

Lyophilized Enzyme for Hydrolysis of Complex-type Fc N-glycans

IgGZERO (EndoS) is an IgG-specific endoglycosidase hydrolyzing complex N-glycans at the Fc N-glycosylation sites. IgGZERO deglycosylates all human IgG subclasses and IgG from many different species, including mouse, rabbit, rat, monkey, sheep, goat, cow, and horse. The enzyme hydrolyzes glycans from the Fc-domain of IgG, even when other glycosylated proteins are present in the solution. It has limited activity on high-mannose and hybrid-type glycans – for deglycosylation of antibodies carrying these glycoforms, we recommend using GlycINATOR® Lyophilized (A0-GL1-020).

IgGZERO is derived from *Streptococcus pyogenes* and expressed in *E. coli*. The enzyme contains a His-tag and has a molecular weight of 112 kDa.

UNIT DEFINITION

One unit IgGZERO Lyophilized deglycosylates ≥ 95% of 1 µg human IgG, when incubated in 10 mM sodium phosphate, 150 mM NaCl, pH 7.4 at 37°C for 30 minutes.

CONTENT AND STORAGE

IgGZERO Lyophilized is supplied lyophilized in 10 mM sodium phosphate, 150 mM NaCl, pH 7.4, with no preservatives added.

IgGZERO Lyophilized is shipped at ambient temperature and should be stored at -20°C upon arrival. After reconstitution, IgGZERO Lyophilized is stable for at least 1 month at +4-8°C.

IgGZERO Lyophilized is for R&D use only.

QUALITY CONTROL

IgGZERO Lyophilized is tested to meet the specifications and lot-to-lot consistency.

IgGZERO Lyophilized is tested for absence of microbial contamination with blood agar plates, Sabouraud dextrose agar plates and fluid thioglycollate medium.

YOU MIGHT ALSO BE INTERESTED IN

IgGZERO® Immobilized
Immobilized enzyme for hydrolysis of complex-type Fc N-glycans in spin columns

GlycINATOR®
Hydrolysis of all types of Fc N-glycans

PNGase F
Hydrolysis of N-glycans

Preparations

Important Information

- For IgGZERO Low Endotoxin, use endotoxin-free materials and solutions.

Additional Materials Required

- Reaction buffer: 10 mM sodium phosphate or 10 mM Tris, 150 mM NaCl, pH 7.4 or similar physiological buffer.[1]

1. Optimal enzymatic activity is obtained at physiological reaction conditions (i.e pH 7.4 and 37°C). Many buffers at pH between 6.0-8.0 can be used, but the reaction conditions need to be optimized.

Hydrolysis of Complex-type Fc N-glycans

Sample Preparation
Prepare the IgG in the reaction buffer. The final IgG concentration in the reaction should be 0.5-10 mg/ml.

1. Prepare IgGZERO

1.1 Reconstitute IgGZERO in ddH_2O according to Table 1.

2. Add IgGZERO

2.1 Add 1 unit IgGZERO / 1 µg IgG.

3. Enzymatic Reaction

3.1 Incubate for 30 min[2] at 37°C.

Table 1. Recommended Volumes for Reconstitution of the IgGZERO Enzyme

Product	Product Size	Reconstitution Volume
A0-IZ1-010	1000 units	50 µl
A0-IZ1-050	5000 units	250 µl
A0-IZ8-020	2000 units	100 µl (endotoxin-free)

2. An increased incubation time may improve deglycosylation of IgG from other species than human.

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