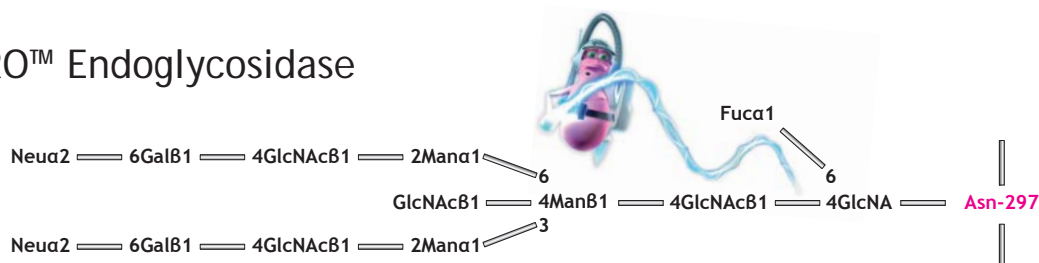


IgGZERO™ Endoglycosidase for Antibody Deglycosylation

Deglycosylation of IgG molecules is an effective tool to minimize side effects in various immunoassays due to complement binding or cross-reactivity.

The Fc portion of IgG contains a conserved complex carbohydrate or glycan attached to the asparagine 297 residue in the CH2 domain of each heavy chain. The presence of this carbohydrate is crucial for proper antibody structure and interactions with cellular IgG Fcγ receptors (FcγRs) and the complement system.

IgGZERO™ Endoglycosidase

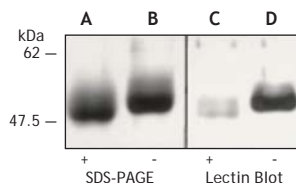


IgGZERO has a specific endoglycosidase activity on native IgG by hydrolyzing the conserved glycans attached to the asparagine 297 residue on the heavy chains of IgG. The activities of other known endoglycosidases require or are enhanced by denaturation of the glycoprotein substrate.

Why IgGZERO™ Endoglycosidase?

- IgGZERO is the first known bacterial enzyme with a unique specificity for native IgG.
- IgGZERO has the ability to hydrolyze human, monkey, mouse, rat, rabbit, horse, goat, dog and swine native and denatured IgG.
- Removal of IgGZERO is extremely easy by the engineered histidine tag in the amino terminal of the enzyme.
- IgGZERO efficiently strips bound IgG from FcγRs without producing additional damage to **native** cells.

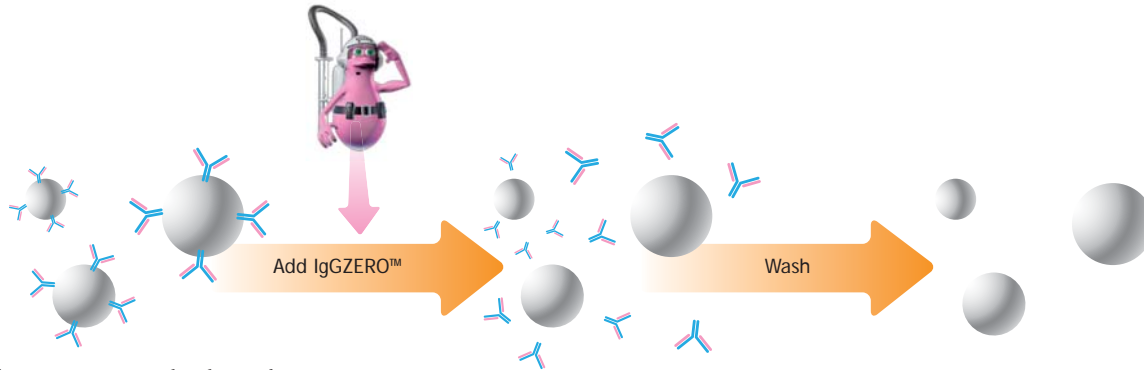
Specificity of IgGZERO™ Endoglycosidase



As shown, the specific SDS-PAGE and lectin blot analysis of IgG incubated with (+) or without (-) IgGZERO. Lanes A and C, IgG incubated with IgGZERO; lanes B and D, IgG incubated with PBS alone. As can be seen, the specific removal of the sugar residue reduces the molecular weight of the IgG band on the SDS-PAGE gel and eliminates detection of the same band on the lectin blot.

IgGZERO™ Endoglycosidase for removal of IgG from primary cells

The effects mediated by Fc γ Rs are of great interest in the study of immunology. In vitro evaluation of such effects is complicated because cells isolated from subjects or individuals are typically pre-loaded with endogenous IgG bound to their Fc γ Rs. These blocked receptors prevent further analysis. IgGZERO helps mitigate this effect by releasing the bound IgG and freeing the receptors to bind targeted IgG fractions.



Primary cells carrying IgG molecules in the Fc γ receptors

Ordering Information

IgGZERO™ Endoglycosidase

Part#	Size	Description	Price
A0-IZ1-010	1,000U	Cleaves 1mg IgG	\$275
A0-IZ1-050	5,000U	Cleaves 5mg IgG	\$1,095
A0-IZ1-250	25,000U	Cleaves 25mg IgG	\$4,495