

IdeZ Protease (IgG specific)

Summary

Catalog No.	YXX05101
Form	Liquid
Storage buffer	0.01M PBS, pH 7.4, 50% glycerol
Concentration	50000U/ml
Purity	>95% as determined by SDS-PAGE.
Applications	Proteomics
Target	IdeZ Protease (IgG Specific)
Biological activity	One unit will cleave $\geq 95\%$ of 1 μ g of recombinant monoclonal IgG in 30 minutes at 37°C.
Endotoxin level	Please contact with the lab for this information.
Expression system	E. coli
Protein length	IdeZ Protease is cloned from Streptococcus equi and expressed in E.coli.
Nature	Recombinant
Predicted molecular weight	37.75 kDa
Stability and Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles.Store at 2 to 8 °C for one week .Store at -20 to -80 °C for twelve months from the date of receipt.

Protocol

1. Add the desired amount of IgG (up to 5mg) in digestion buffer or other compatible buffer.
2. Add IdeZ Protease to the IgG sample: Add 1 unit of IdeZ Protease per 1µg of IgG to be digested.

For example, add 1µl (50 units) of IdeZ Protease to digest 50µg of IgG.

3. Incubate sample at 37°C for 30–60 minutes.

IdeZ Protease is most active in buffers at or near neutral pH. The recommended digestion buffer is 50mM sodium phosphate, 150mM NaCl (pH 6.6), but many common biological buffers such as Tris or PBS also can be used. Buffers outside this pH range (e.g., acetate buffers) may be used, but the incubation time and/or enzyme amount may have to be optimized on a case-by-case basis.

Experimental Procedure

Mouse IgG2a and IgG3 typically require 2–4 hours for complete digestion. In some cases, human IgG2 may require incubation beyond 60 minutes.

Notes

IgG concentration ideally should be in the range of 1–20mg/ml.

IdeZ Protease efficiently cleaves human, humanized, chimeric, sheep, rabbit and monkey IgGs as well as mouse IgG2a and IgG3.

IdeZ Protease also will cleave many Fc-fusion proteins as well as antibody-drug conjugates (ADCs).

IdeZ Protease does not cleave mouse IgG1/IgG2b, rat, porcine, bovine or goat IgG. IdeZ Protease also does not cleave non-IgG isotypes including IgA, IgM, IgD and IgE.

Species

Streptococcus equi

Shipping

In general, proteins are provided as lyophilized powder/frozen liquid. They are shipped out with dry ice/blue ice unless customers require otherwise.

Note

For research use only.

Description

IdeZ Protease is a recombinant antibody specific protease that recognizes all human, sheep, monkey, and rabbit IgG subclasses, cleaving specifically at a single recognition site below the hinge region, to yield a homogenous pool of F(ab')₂ and Fc fragments. IdeZ Protease more effectively cleaves murine IgG2a and IgG3 than IdeS.

Data Image



SDS PAGE for recombinant Streptococcus equi IdeZ Protease