

Active Recombinant Streptococcus pyogenes IdeS protease

Cat. No. IdeS protease-11S **Lot. No.** (See product label)

SPECIFICATION

Product Overview	IdeS protease is derived from Streptococcus pyogenes and can recognize IgG from human and various other animal sources, such as mouse, rabbit, monkey, sheep, and human-animal chimeric IgG. Expressed in E.coli, this product exhibits strict substrate selectivity and excellent cleavage activity, thus serving as a powerful tool for characterizing the structure of antibodies or Fc-fusion proteins. Residual Host Cell Protein: <50 ppm
Species	Streptococcus pyogenes
Source	E.coli
Description	Streptococcus pyogenes IdeS protease can specifically recognize IgG. It cleaves IgG at a specific site in the lower hinge region, hydrolyzing it into intact F (ab') ₂ fragments and Fc fragments. Moreover, IdeS protease can recognize IgG from human and various other animal sources, including mice, rabbits, monkeys, sheep, and human-animal chimeric IgG.
Purity	≥ 95% by SDS-PAGE
Bio-activity	≥ 35 U/μL
Advantages	1. High specificity: It has strict substrate specificity; 2. High stability: Each batch undergoes strict quality control to ensure controllable product batch-to-batch stability; 3. High purity: It is free from contamination by other proteases and has no other endo- and exo- glycosidase activities, with a purity of ≥ 95%; 4. Short digestion time: It can

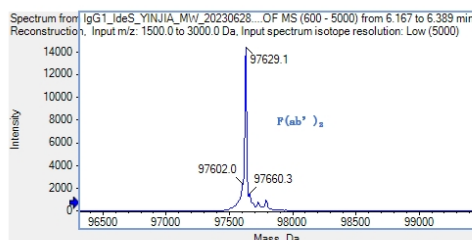
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	cleave IgG in as fast as 30 minutes.
Unit definition	One unit (1 U) is defined as the amount of the enzyme required to cleave 1 µg of human IgG (with a purity > 95%) in a PBS solution at 37 centigrade within 30 minutes.
Usage	1. Prepare the following reaction system: IgG: 20 µg 10× IdeS Reaction buffer: 2.5 µL IdeS protease: 1 µL Water: Up to 25 µL 2. Incubate at 37 centigrade for 30-60 minutes. After the reaction is completed, perform SDS-PAGE or HPLC to analyze the enzymatic digestion results.
Applications	It is used for the structural characterization of therapeutic antibodies, Fc-fusion proteins, and antibody-drug conjugates.
Note	1. Try to avoid freeze-thaw cycles of this product after receipt; 2. Please wear lab coat and disposable gloves when using; 3. This product should not be used directly for clinical diagnosis and treatment.
Stability	This product should be stored at -20 centigrade and can be stored for at least 12 months.
Storage	Store at -20 centigrade.
Storage Buffer	20mM Tris-HCl, 50mM NaCl, 5mM EDTA, pH 7.5
Shipping	Dry Ice

Performance Tests



Preparation of F(ab')₂ fragment by
IdeS

Preparation of F (ab')₂ and Fc fragments by IdeZ

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