IdeS Protease (IgG specific)

Summary

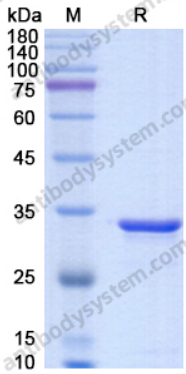
Catalog No.	YXX05001
Form	Liquid
Storage buffer	0.01M PBS, pH 7.4, 50% glycerol
Concentration	40000U/ml
Purity	>90% as determined by SDS-PAGE.
Applications	Proteomics
Target	IdeS Protease (IgG Specific)
Biological activity	One unit will cleave ≥95% of 1μg of recombinant monoclonal IgG in 30 minutes at 37°C.
Endotoxin level	Please contact with the lab for this information.
Expression system	E. coli
Protein length	IdeS Protease is cloned from Streptococcus pyogenes and expressed in E.coli.
Nature	Recombinant
Predicted molecular weight	37.57 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.

Experimental Procedure	Digestion reaction condition 37℃, 30min Protocol 1. Add appropriate amount of IgG (to 5mg) in digestive juice; 2. Add IdeS protease to IgG samples: add 1 unit of IdeS per 1ug of IgG; 3. Incubate the sample at 37°C for 30-60min. * IdeS proteases are most active in buffers at or near neutral pH. The recommended reaction buffer is 50 mM sodium phosphate and 150 mM NaCl (pH 6.6), but most common biological buffers are suitable, such as Tris or PBS. Buffers outside this pH range (such as acetate buffer) may also be suitable, but the incubation time or enzyme amount needs to be optimized according to the actual situation.
Species	Streptococcus pyogenes
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

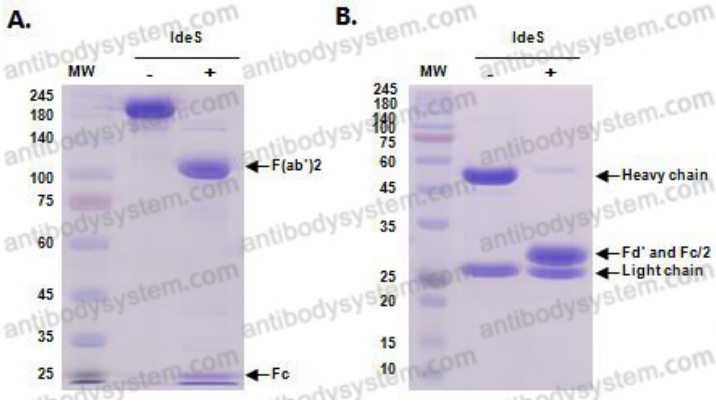
IdeS Protease is an immunoglobulin-degrading enzyme from Streptococcus pyogenes (IdeS). It cleaves Immunoglobulin G (IgG) with high specificity at a single site below the hinge region, yielding F(ab’)2 and Fc fragments.

Data Image



SDS-PAGE

SDS PAGE for recombinant Streptococcus pyogenes IdeS Protease



Experiment Example

Results of trastuzumab digestion separated under nonreducing and reducing conditions.
Trastuzumab (10 ug) was incubated with 10 units of IdeS Protease for30 minutes at 37℃ using the recommended digestion buffer (50mM sodium phosphate, 150mM NaCl [pH 6. 6]).
The digestion products were analyzed by SDS-PAGE under nonreducing (Panel A) and reducing (Panel B) conditions.