

## Product overview

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<b>Product Name</b>	IdeZ Protease
<b>Catalog No.</b>	ATE00014
<b>Expression host</b>	E.coli
<b>Restriction sites</b>	The protease has very high substrate specificity, can only recognize IgG, and digest at specific site in the lower hinge region of the antibody to hydrolyze IgG into intact F (ab') <sub>2</sub> and Fc fragments.
<b>MW</b>	38 kDa
<b>Purity</b>	>95% as determined by SDS-PAGE quantitative densitometry by Coomassie Blue Staining.
<b>Enzyme activity</b>	50U/μl
<b>Concentration</b>	The unit enzyme activity of different batches of IdeZ protease can be determined by SDS-PAGE of cleavage of recombinant IgG.
<b>Unit Definition</b>	The amount of enzyme required to shear 1μg of recombinant monoclonal IgG > 95% at 37°C for 30 min is defined as an active unit.
<b>Digestion reaction condition</b>	37°C, 30min
<b>Tag</b>	N-terminal His Tag

## Product performance

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<b>Form</b>	Liquid
<b>Buffer</b>	PBS pH7.5, 50% glycerol
<b>Storage</b>	Store at -20 °C for 12 months from the date of receipt.

## Standard Operating Procedure

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### Recommendations:

1. Add appropriate amount of IgG (maximum amount 5mg) to digestion buffer or other suitable buffer;
2. Add IdeZ protease to IgG samples: add 1 unit of IdeZ per 1μg IgG;



3. Incubate the sample at 37 ° C for 30-60min. IdeZ proteases are most active in buffers at or near neutral pH. The recommended reaction buffer is 50 mM sodium phosphate, 150 mM NaCl (pH 6.6). Many common biological buffers such as Tris or PBS can also be used. When using a buffer (such as acetate buffer) outside this pH range, the incubation time or enzyme amount needs to be optimized according to the actual situation.

**Notices :**

1. Ideal concentration of IgG: 1-20mg/ml;
2. IdeZ protease efficiently cleaves human, humanized, chimeric, sheep, rabbit and monkey IgG and mouse IgG2a and IgG3. IdeZ protease will also cleave many Fc fusion proteins and antibody-drug conjugates (ADC);
3. IdeZ protease does not cleave mouse IgG1 / IgG2b, rat, pig, cow or goat IgG. IdeZ protease will not cleave non-IgG isotypes, including IgA, IgM, IgD and IgE;
4. IdeZ protease has His tag, which is easy to remove;
5. IdeZ protease can be used in the same reaction with PNGase F (Catalogue No. ATE00005), using the recommended digestion buffer to complete Fc glycans remove.

