

IdeS

Product Information

Product Name	Catalog Number	Size
IdeS(50 U/μl)	IDE-SE101-A	2500U
	IDE-SE101-B	25 KU

Product Description

IdeS (Immunoglobulin G-degrading enzyme of *Streptococcus pyogenes*), also known as Mac-1, is a type of Cysteine protease secreted by *Streptococcus pyogenes*. IdeS has very high substrate specificity and can only recognize IgG (no IgA, IgD, IgE, or IgM) and digest specific locus under the hinge region, hydrolyzing IgG into F(ab')₂ and Fc fragments. IdeS can recognize IgG molecules from human or other animal resources such as sheep, rabbits, monkeys, or even chimeric IgG. It also exhibits certain reactivity to mouse IgG2a and IgG3. IdeS can also catalyze Fc fusion protein and ADC (antibody-drug conjugate) hydrolysis.

Source *E.coli*

Label His tag at the N-Terminus

Storage Buffer PBS, 50% Glycerol, pH 7.4

Enzyme Activity Definition

One unit (1U) is defined as the amount of enzymes required to digest >95% of 1μg recombinant monoclonal IgG at 37°C for 30 min.

Transportation/Storage

Ship on dry ice. Store at -20±5°C. Avoid repeated freeze-thaw cycles.

Applications

Hydrolysis of therapeutic antibody (IgG), Fc fusion protein, Antibody-Drug Conjugates.

Protocol

- 1) Add IdeS into the IgG sample (1U IdeS for 1 μg IgG recommended)
- 2) Incubate samples at 37°C for 30 minutes. IdeS has the strongest enzymatic activity in pH neutral or near-neutral buffers. Suggested buffer: PBS, pH7.4. Other buffers such as 50 mM Sodium Phosphate, 150 mM NaCl, pH 6.6, are also applicable.

Cautions

- 1) The recommended concentration range of IgG in the reaction: 0.5–20 mg/ml.
- 2) IdeS cannot digest mouse IgG1/IgG2b and IgG from rat, pig, cow or goat.