

IdeZ IgG protease

Cat.# 5000 units (125 uL)

Cat.# 25000 units (625 uL)

Description: Similar to IdeS protease, IdeZ specifically cleaves peptide bonds below the hinge region of IgG to form Fc and F(ab')₂ fragments. IdeZ cleaves all subclasses of human, rabbit, sheep, and monkey IgG. IdeZ also cleaves mouse IgG2a and IgG3 more efficiently than IdeS. Engineered with a C-ter strep tag; can be removed by strep tactin beads.

IdeZ IgG cleavage site:

CPAPELLG*GPSVF

Unit definition: One unit is defined as the amount of enzyme required to digest >95% of 1 ug of human IgG in 30 minutes at 37°C.

Storage conditions: Long term storage at – 20 C. Avoid repeated freeze-thaw cycles.

Purity: >90% by SDS-PAGE gel

Concentration: 40 units/uL

Formulation: 50 mM Phosphate buffer pH 6.6, 150 mM NaCl

Product Source: Cloned from *Streptococcus equi* subspecies *zooepidemicus* and expressed in *E. coli*.



Figure 1. Quality control assay. IdeZ IgG cleavage assay on SDS PAGE gel in reduced condition.

Lane 1. Marker

Lane 2. Human IgG

Lane 3. Human IgG with IdeZ

Protocol for IgG cleavage

1. Substrate concentration should be around 0.5-1mg/mL.
2. Around pH 7.4, add IdeZ to substrate and incubate at 37°C for at least 30 minutes.

Reference:

1. Lannergård, Jonas, and Bengt Guss. "IdeE, an IgG-endopeptidase of *Streptococcus equi* ssp. *equi*." *FEMS microbiology letters* 262.2 (2006): 230-235.