

IdeS protease (Low Endotoxin) from Streptococcus pyogenes, Recombinant

Cat. No. NATE-1778

Lot. No. (See product label)

Introduction

Description IdeS protease digests IgG only at one specific site just below the hinge region, resulting in F(ab')₂ and Fc-fragments. Since IdeS protease only cleaves at one specific site below the hinge region, there is no risk of over digestion if the incubation time is increased for several hours. IdeS protease digests IgG under physiological reaction conditions thus preserving the immunoreactivity. Best activity is obtained at 37°C but digestion can also be performed at room temperature using prolonged reaction time.

Synonyms IdeS protease; FabRICATOR

Product Information

Species Streptococcus pyogenes

Source E. coli

Form Lyophilized powder with no preservatives added

Purity > 95% homogeneity as determined by SDS-PAGE analysis using Coomassie Blue detection.

Optimum pH 6.5-7.5

Buffer Buffers tested for compatibility with IdeS protease LE digestion at different pH. Note that IdeS protease is irreversibly inactivated below pH 5.0. Digestion above pH 8.0 requires prolonged/optimized conditions. Phosphate buffer saline (PBS) 6.0 – 8.0 Tris buffer 7.0 – 8.0 MES buffer 5.5 – 6.5 HEPES buffer 7.0 – 8.0 Ammonium bicarbonate buffer 6.0 – 7.0 Sodium acetate buffer 6.0

Endotoxin Level <0.04 EU/vial for the 2000 unit vials and <0.10 EU/vial for the 5000 unit vials.

Unit Definition One unit digests > 95% of 1µg human IgG when incubated in 10 mM sodium phosphate, 137 mM NaCl, 2.7mM KCl pH 7.4 at 37°C for 30min.

Storage and Shipping Information

Storage at -20°C

Stability The enzyme is reconstituted by addition of water and after reconstitution it is stable for 1 month at +4-8°C. The enzyme can be aliquoted and stored at -20°C for at least 6 months. The product is shipped at ambient temperature but should be stored at -20°C upon arrival.