

Product Details

SpeB is a unique recombinantly produced cysteine protease that digests antibodies from many species and subclasses in the hinge region, producing a homogenous pool of Fab fragments. The enzyme requires reducing conditions for activity on IgG. Human, mouse, rat, goat and sheep IgG are digested by SpeB, yielding Fab and Fc fragments. The primary digestion site on human IgG1 is KTHT / CPPCPAPE.

Application

Purified and homogenous Fab fragments can be used in many applications, including: 1. Study monovalent binding of Fab fragments to the antigen. 2. Elimination of Fc-mediated effector functions. 3. Reduced unspecific binding from Fc interactions.

Unit Definition

One unit digests ≥ 95% of 1 μg human IgG1 when incubated in PBS with 5 mM DTT or TCEP, pH 7.4 at 37°C for 1 hour.

Enzyme Activity

>40 U/μL

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM Tris, 500 mM NaCl, pH7.0 with glycerol as protectant.

Contact us for customized product form or formulation.

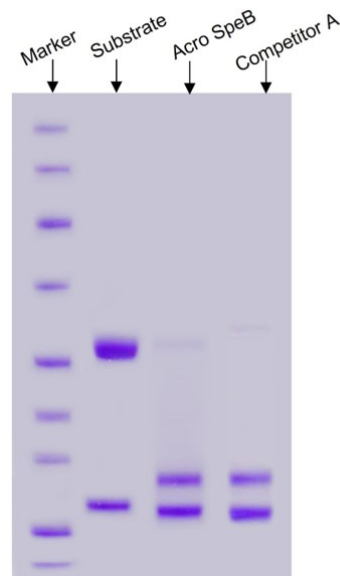
Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.*

Storage

- This product is stable after storage at:
- The product MUST be stored at -70°C or lower upon receipt.
  - -70°C for 12 months under sterile conditions.

Bioactivity



100 unit SpeB digests ≥ 95% of 100 μg human IgG1 in PBS, 5 mM DTT , pH 7.4 at 37°C for 1h (QC tested).

