

## 32-6765: GLU-C *S.aureus*

**Alternative Name :** Glutamyl endopeptidase (EC:3.4.21.19), Endoproteinase Glu-C, Staphylococcal serine proteinase, V8 protease, V8 proteinase, sspA.

### Description

Source: *Escherichia Coli*.

Sterile Filtered lyophilized powder.

Glutamyl endopeptidase (GLU-C) is an enzyme which cleaves peptide bonds on the carboxyl-terminal side of glutamic acid and, less frequently, aspartic acid (for example: Glu-|-Xaa, Asp-|-Xaa). GLU-C is a pathogenic factor involved in the adherence and colonization of human tissue. GLU-C preferentially cleaves peptide bonds on the carboxyl-terminal side of aspartate and glutamate. GLU-C is required for proteolytic maturation of thiol protease SspB and inactivation of SspC, an inhibitor of SspB. GLU-C is the most important protease for degradation of fibronectin-binding protein (FnBP) and surface protein A, which are involved in adherence to host cells. Furthermore, GLU-C protects bacteria against host defense mechanism by cleaving the immunoglobulin classes IgG, IgA and IgM. GLU-C may also be involved in the stability of secreted lipases.

Recombinant Staphylococcal GLU-C produced in *E.coli* is a single, non-glycosylated polypeptide chain containing a total of 267 amino acids and having a molecular mass of 28.9kDa.

### Product Info

**Amount :** 50 µg / 250 µg

**Purification :** Greater than 95% as determined by SDS-PAGE.

**Content :** Lyophilized from a sterile (0.2µm) filtered aqueous solution containing 10mM sodium phosphate, pH 7.5.

It is recommended to reconstitute the lyophilized GLU-C in sterile 18M-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Storage condition :** Lyophilized GLU-C although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GLU-C should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Amino Acid :** MLPNNDRHQI TDTTNGHYAP VTYIQVEAPT GTFIASGVVV GKDTLLTNKH VVDATHGDPH ALKAFPSAIN QDNYPNGGFT AEQITKYSGE GDLAIVKFSP NEQNKHIGEV VKPATMSNNA ETQVNQNITV TGYPGDKPVA TMWESKGGIT YLKGEAMQYD LSTTGGNSGS PVFNEKNEVI GIHWGGVPNE FNGAVFINEN VRNFLKQNIE DIHFANDDQP NNPDPNPDPN NPDNPNNPDE PNNPDNPNNP DNPDPNGDNNN SDNPDA.