Data Sheet (Cat.No.TMPH-00419)

TargetMol

Microbial collagenase Protein, Clostridium perfringens, Recombinant (His & Myc)

General Information

Synonyms: colA;120 kDa collagenase;Microbial collagenase;Collagenase ColA

Protein Construction: 90-370 aa

Species: C.perfringens

Expression Host: E. coli

Accession: P43153

Molecular Weight: 39.7 kDa (predicted)

AA Sequence: NKIYTFDELNRMNYSDLVELIKTISYENVPDLFNFNDGSYTFFSNRDRVQAIIYGLEDSGRTYTADDDKGIPTLV EFLRAGYYLGFYNKQLSYLNTPQLKNECLPAMKAIQYNSNFRLGTKAQDGVVEALGRLIGNASADPEVINNCI YVLSDFKDNIDKYGSNYSKGNAVFNLMKGIDYYTNSVIYNTKGYDAKNTEFYNRIDPYMERLESLCTIGDKLN NDNAWLVNNALYYTGRMGKFREDPSISQRALERAMKEYPYLSYQYIEAANDLDLNFGGKN

QC Testing

Biological Activity: Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 85% as determined by SDS-PAGE.

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Clostridial collagenases are among the most efficient degraders of eukaryotic collagen known; saprophytes use

collagen as a carbon source while pathogens additionally digest collagen to aid in host colonization. Has both tripeptidylcarboxypeptidase on Gly-X-Y and endopeptidase activities; the endopeptidase cuts within the triple helix region of collagen while tripeptidylcarboxypeptidase successively digests the exposed ends, thus clostridial collagenases can digest large sections of collagen.

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