

## Toxin zeta Protein, *S. agalactiae*, Recombinant (His)

### General Information

Synonyms: Toxin zeta;UDP-N-acetylglucosamine kinase (UNAG kinase)

Protein Construction: 1-287 aa

Species: *Streptococcus agalactiae*

Expression Host: *P. pastoris* (Yeast)

Accession: P0A4M2

Molecular Weight: 34.7 kDa (predicted)

AA Sequence:

MANITDFTEKQFEDRLEKNVERLTKNRLAVESPTAFLGGQPGSGKTSLSAISEETQGNVVIIDNDFKQQHP  
NFDELVKLYEKDVVKYVTPYSNRMTEAIIISRLRDGYNLVIEGTGRITDVPPIQTATMLQAKDYETKMYVMAVP  
KINSYLGTIERYETMYADDPMTARATPKQAHDIVVKNLPTNLETLHKTGLFSDIRLYNREGVKLYSSLETSPISIP  
KETLERELNRKVSQKEIQPTLERIEQKMQVQNHQETPEFKAIQKMEQLQPPTPIPKTPKLPKI

### 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: > 90% as determined by SDS-PAGE.

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

Formulation: Tris-based buffer, 50% glycerol

### Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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

Toxic component of a type II toxin-antitoxin (TA) system. Phosphorylates UDP-N-acetyl-D-glucosamine (UNAG) on the 3'-hydroxyl group of the N-acetyl-D-glucosamine moiety, yielding UNAG-3P. UNAG-3P inhibits MurA, the first committed step in cell wall synthesis, which is then blocked. Phosphorylation is inhibited by cognate epsilon antitoxin. Part of a postsegregational killing (PSK) system involved in the killing of plasmid-free cells. The zeta

toxin induces programmed cell death.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481