



Recombinant Clostridium botulinum Botulinum neurotoxin type A (botA), partial

| | |
|--------------------------|--|
| Product Code | CSB-YP320799CLQ |
| Relevance | Inhibits acetylcholine release. The botulinum toxin binds with high affinity to peripheral neuronal presynaptic mbrane to the secretory vesicle protein SV2. It binds directly to the largest luminal loop of SV2A, SV2B and SV2C. It is then internalized by receptor-mediated endocytosis. The C-terminus of the heavy chain (H) is responsible for the adherence of the toxin to the cell surface while the N-terminus mediates transport of the light chain from the endocytic vesicle to the cytosol. After translocation, the light chain (L) hydrolyzes the 197-Gln- -Arg-198 bond in SNAP-25, thereby blocking neurotransmitter release. Inhibition of acetylcholine release results in flaccid paralysis, with frequent heart or respiratory failure. |
| Abbreviation | Recombinant Clostridium botulinum botA protein, partial |
| Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| Uniprot No. | P0DPI0 |
| Alias | Bontoxilysin-A ;BOTOX |
| Product Type | Recombinant Protein |
| Immunogen Species | Clostridium botulinum |
| Purity | Greater than 90% as determined by SDS-PAGE. |
| Sequence | MPFVNKQFNYKDPVNGVDIAYIKIPNVGQMGPVKAFKIHNKIWWVIPERDTFTNP EEGDLNPPPEAKQVPVSYDSTYLSTDNEKDNYLKGVTCLFERIYSTD LGRML LTSIVRGIPFWGGSTIDTELKVIDTNCINVIQPDGSYRSEELNLVIIGPSADIIQFE CKSFGHEVLNLTRNGYGSTQYIRFSPDFTFGFEESLEVDTNPLL GAGKFATDP AVTLAHELHAGHRLYGIAINPNRVFKVNTNAYYEMSGLEVSFEELRTFGGHDA KFIDSLQENEFRLYYYNKFKDIASLTNKA SIVGTTASLQYMKNVFKEKYLLSED TSGKFSVDKLFKLYKMLTEIYTEDNFVKFFKVLNRKTYLNFDKAVFKINIVPK VNYTIYDGFNLNRNTNLAANFNGQNTEINN MNFTKLKNFTGLFEFYKLLCVRGIIT |
| Research Area | Others |
| Source | Yeast |
| Target Names | botA |
| Protein Names | Recommended name: Botulinum neurotoxin type A Short name= BoNT/A EC= 3.4.24.69Alternative name(s): Bontoxilysin-A Short name= BOTOXCleaved into the following 2 chains: 1. Botulinum neurotoxin A light chain 2. Botulinum neurot |
| Expression Region | 1-436aa |
| Notes | Repeated freezing and thawing is not recommended. Store working aliquots at |



4°C for up to one week.

Tag Info

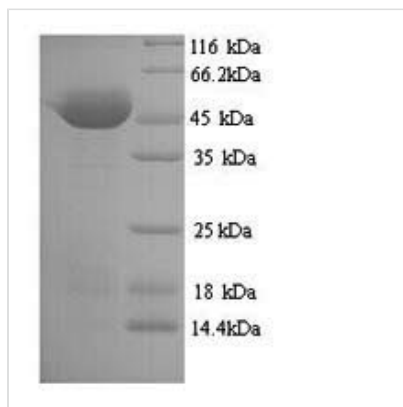
N-terminal 6xHis-tagged

Mol. Weight

52.0kDa

Protein Length

Partial

Image


(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.