

Cholera Toxin Subunit B (CTB, Recombinant)

Cat #: BGT-CHM-432

Size: 100ug/500ug/1mg

Storage and Handling

Store at 4°C. Product is stable for at least 12 months from date of receipt when stored as recommended. Reconstitute lyophilized CTB with sterile deionized water to make a stock solution of 1 mg/mL. The resulting stock solution will be in 1X PBS. Mix gently for 30 to 60 minutes at room temperature to dissolve, avoiding vigorous mixing or vortexing. Reconstituted CTB is stable for 3 months at 4°C. Do not freeze.

Molecular Weight: 11.7 kDa (under reducing conditions)

Purity: > 95% pure, determined by reducing SDS-PAGE

Endotoxin Level: < 1 EU/ug, determined by Pyrogene® Recombinant Factor C Assay.

Product Introduction

The recombinant cholera toxin subunit B (CTB) is purified from *E. coli* as a single, non-glycosylated polypeptide chain. Cholera toxin is the symptom-causing toxin produced by the bacteria *Vibrio cholerae* during cholera infection.

The active holo-toxin from Cholera is composed of a hexamer. Subunit A is the toxic enzymatic subunit present in one copy per toxin. Subunit B is the receptor binding subunit that is found as a pentamer in each toxin and is non-toxic, making it useful for cell biological studies. CTB is used as a macrophage stimulant (1) and a vaccine adjuvant (2). CTB also been used to determine endotoxin sensitivity of transgenic mice expressing human caspase-4 (3).

This purified recombinant CTB is free of stabilizers and ready to conjugate after reconstitution.

CTB (Recombinant) Sequence

MTPQNITDLC AEYHNTQIHT LNDKIFSYTE SLAGKREMAI ITFKNGATFQ VEVPGSQHID SQKKAIERMK DTLRIAYLTE
AKVEKLCVWN NKTPHAIAAI SMAN

References

1. Ther Adv Vaccines 3(5-6), 155-163 (2015); 2. Infect Immun. 75(6), 3150-3159 (2007); 3. J Immunol. 193(1), 335-343 (2014).