



Diphtheria Toxin Mutant CRM197

Product No.: BAM-01-515

This Diphtheria toxin CRM197 was highly purified from growth media of *Corynebacterium diphtheriae* mutant CRM197. CRM197 like wild-typediphtheria toxin is a single polypeptide chain of 535 amino acids (58 kD) consisting of two subunits linked by disulfide bridges. Binding to the cell surface of the less stable of these two subunits allows the more stable part of the protein to penetrate the host cell. Wild-type toxin catalyzes the ADP-ribosylation of eucaryotic elongation factor-2 (eEF2) by using NAD, thus inactivating this protein. However, CRM197 has an alteration of 52nd Gly to Glu and it has no ADP ribosylation activity nor toxicity to cells.

Specification

Package size: 200 μg

Purity: More than 95% pure (see below; SDS-PAGE without mercaptoethanol)

Form: 2 mg/ml in 20 mM Tris-Hcl (pH 7.2), 150 mM NaCl

Storage: - 70°C

Application

- 1) CRM197 retains activity to bind the receptor, HB-EGF (Heparin-Binding EGF-like Growth Factor) and inhibits the growth-stimulating activity of HB-EGF (Ref.1).
- 2) Putative drug for treatment of malignant tumors such as ovarian tumor, which secretes higher levels of HB-EGF (Ref 2).



Reference:

1. Mitamura T. et al. J. Biol. Chem. 272: 27084 (1997)

2. Miyamoto S. et al. Cancer Res 64:5720 (2004)

For research use only; not for use as a diagnostic.

