

# Recombinant Diphtheria Toxin Mutant CRM197

Catalog # FL122

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC, dimers and high molecular weight impurities: <4% by SEC-HPLC.
Endotoxin	< 0.01 EU/μg of rCRM197 protein as determined by LAL method.
Expression System	Expressed in E. coli.
Tag	Tag free.
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 20 mM PB, with 0.025% (v/v) Tween-80 pH7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	AMV91693 Gly2-Ser536
Amino acid sequence	GADDVVDSSKSFVMENFSSYHGTKPGYVDSIQKGIQKPKSGTQGNYYDDWKEFYSTDNKYDAAGYSVDNENPLSGKAGG VVKVTYPGLTKVLALKVDNAETIKKELGLSLTEPLMEQVGT EEFIKRFGDGASRVVLSLPAEGSSSVEYINNWEQAKALSVE LEINFETRGRGQDAMYEYMAQACAGNRVRRS VGSLSLSCINLDWDVIRDKTKTKIESLKEHGPIKNMSESPNKT VSEKAK QYLEEFHQTALEHPELSELKTVTGTNPV FAGANYAAWAVNVAQVIDSETADNLEKTTAALSILPGIGSVMGIADGAVHHNTE EIVAQSIALSSLMVAQAIPLV GELVDIGFAAYNFVESIINLFQVVHNSYNRPAYSPGHKTPFLHDGYAVSWNTVEDSIIRTGF QGESHDIKITAENTPLIAGVLLPTIPGKLDVNKSKTHISVNGRKIRMRCAIDGDVTFPCRKSPVYVNGVHANLHVAFHR SSSEKIHSNEISSDSIGVLGYQKTV DHTKVNSKLSLFFEIKS
Molecular weight	Approximately 58.4 kDa, a single non-glycosylated polypeptide chain containing 535 amino acids
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 12 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reconstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant Diphtheria Toxin Mutant CRM197 is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

CRM197 is a non-toxic mutant of diphtheria toxin having a single amino acid substitution of glycine with glutamic acid. CRM197 is a well-defined protein and functions as a carrier for polysaccharides and haptens making them more immunogenic. CRM197 is utilized as a carrier protein in a number of approved conjugate vaccines for diseases caused by *Streptococcus pneumoniae*, *Haemophilus influenzae b* and *Neisseria meningitidis*. Recombinant CRM197 is a 58.4kDa globular protein containing 535 amino acids.

