



Recombinant DENV type 3 Capsid Protein (a.a. 1-102) [His] (DAG1982)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	C-terminal 6xHis tagged Capsid Protein (Dengue virus 3)(a.a. 1-102)
Antigen Description	A capsid is the protein shell of a virus. It consists of several oligomeric structural subunits made of protein called protomers. The observable 3-dimensional morphological subunits, which may or may not correspond to individual proteins, are called capsomeres. The capsid encloses the genetic material of the virus. Capsids are broadly classified according to their structure. The majority of viruses have capsids with either helical or icosahedral structure. Some viruses, such as bacteriophages, have developed more complicated structures due to constraints of elasticity and electrostatics. The icosahedral shape, which has 20 equilateral triangular faces, approximates a sphere, while the helical shape is cylindrical. The capsid faces may consist of one or more proteins. For example, the foot-and-mouth disease virus capsid has faces consisting of three proteins named VP1–3
Nature	Recombinant
Expression System	E. coli
Species	DENV
Purity	> 95%, based on SDS PAGE
Conjugate	His
Applications	WB standard; antibody ELISA; immunogen.
Procedure	None
Format	Each vial contains 100 µg of lyophilized protein in PBS with 8M Urea.
Concentration	N/A

Size	100 µg, 1 mg
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Dengue virus (DENV) in one of four serotypes is the cause of dengue fever. It is a mosquito-borne single positive-stranded RNA virus of the family Flaviviridae; genus Flavivirus. All four serotypes can cause the full spectrum of disease. Its genome is about 11000 bases that codes for three structural proteins, capsid protein C, membrane protein M, envelope protein E; seven nonstructural proteins, NS1, NS2a, NS2b, NS3, NS4a, NS4b, NS5; and short non-coding regions on both the 5' and 3' ends. Further classification of each serotype into genotypes often relates to the region where particular strains are commonly found or were first found.
Keywords	capsid protein C; Dengue virus 4; Flavivirus; capsid protein; DENV capsid protein; DV4 capsid protein; Dengue Virus 4 capsid protein