



Recombinant Dengue Virus Serotype 2 virus-like particles antigen (DAGC018)

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

PRODUCT INFORMATION

Product Overview	Recombinant Dengue Virus serotype 2(Thailand/16681/84) virus-like particles consisting of Envelope, pre-Membrane and Membrane protein produced in mammalian HEK293 cells. The C terminal 20% of the DENV E protein was replaced by the corresponding Japanese Encephalitis Virus SA-14 sequence(Envelope protein amino acids 397-495). The replaced sequence corresponds to the transmembrane and intraparticle portion of the protein.
Nature	Recombinant
Expression System	HEK293 cells
Species	DENV
Purity	> 95% pure by SDS-PAGE
Conjugate	Unconjugated
Molecular Weight	Non-reducing SDS-PAGE gel showing purified Dengue virus serotype 2 virus-like particles; envelope protein at approx. 55kDa, prM protein running at approx. 18kDa and M protein at approx. 10kDa.
Stability	At 4°C:1 week. At -80°C: 1 year
Format	Liquid
Concentration	0.223mg/ml
Size	100 µg
Buffer	10mM sodium phosphate, 20mM sodium citrate, 154mM sodium chloride, pH7.4
Preservative	None

Storage	Short term: 2-8°C; Long term: -80°C. Can be frozen, avoid multiple freeze/thaw cycles. Avoid excessive mixing or shocking to prevent aggregation. Long term storage above -80°C may result in aggregate formation.
Ship	Dry ice

BACKGROUND

Introduction	Dengue virus (DEN) is a small single-stranded RNA virus comprising four distinct serotypes (DEN-1 to -4). These closely related serotypes of the dengue virus belong to the genus <i>Flavivirus</i> , family <i>Flaviviridae</i> . The mature particle of the dengue virus is spherical with a diameter of 50nm containing multiple copies of the three structural proteins, a host-derived membrane bilayer and a single copy of a positive-sense, single-stranded RNA genome. The genome is cleaved by host and viral proteases in three structural proteins (capsid, C, prM, the precursor of membrane, M, protein and envelope, E) and seven nonstructural proteins (NS).
Keywords	Dengue Virus Serotype 2 virus-like particles; DENV Type 2 VLP; DENV Type 2; DENV; VLP; Dengue Virus