

Dengue Virus Envelope Subtype-1 D-III Recombinant VIRAL ANTIGEN

Catalog Number: PRP-011DEN

Quantity: 100 micrograms, 500 micrograms, 1 milligram 50 mM sodium chloride-phosphorous buffer, pH-7.4.

Host: E. coli

Background:

Dengue virus is caused by one of four closely related virus serotypes of the genus *Flavivirus*, family Flaviviridae. Each serotype is sufficiently different from the other such that there is no cross-protection and epidemics caused by multiple serotypes (hyperendemicity) can occur. In cell culture experiments and in mice Morpholino antisense oligos have shown specific activity against dengue virus.

Specificity and Preparation:

The *E. coli*-derived recombinant 12 kDa protein is from the dengue type-1 envelope III domain immunodeterminant region. This protein spans amino acids 300-400 of the domain III region and is fused with a 6 His tag. The protein is particularly important for diagnostic and vaccine development because it contains multiple serotype neutralizing epitopes and the receptor-binding domain. The protein is purified by proprietary chromatography techniques. Purity is >95% as determined by 10%-PAGE followed by coomassie staining. Sequence:

VMCTGSFKLEKEVAETQHGTVLVQVKYEGTDAPCKIPFSTQDEKGVTQN GRLITANPIVTDKEKPVNIEAEPP FGESYIVVGAGEKALKLSWFKKGSV

Usage and Storage:

The end user must determine the optimum working titer for each particular application. Although stable at 4°C for 1 week, the material should be stored below -18°C. Avoid repeated freezing and thawing. Gently spin down material before use; 5-10 seconds in a microfuge should be adequate.

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