Recombinant Dengue Virus Serotype 3 DIII Envelope Protein

Cat. No. DEN-176 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Dengue virus serotype 3 DIII Envelope protein is a recombinant protein manufactured in E. coli.
Background	Dengue virus is a member of the flavivirus family, which includes Zika virus, West Nile virus and Japanese Encephalitis virus. Many of the proteins expressed by these viruses are very similar, and serological testing for these viruses can be complicated by problems of cross-reactivity. In this context, the use of highly purified antigens, that are glycosylated and folded as native proteins can be highly important in the development of accurate immunoassays. Dengue infection is caused by any one of four related Dengue virus serotypes DENV1-4, which are transmitted by mosquitoes and co-circulate in endemic areas. With more than one-third of the world's population living in areas at risk of transmission, dengue infection is a leading cause of illness and death in the tropics and subtropics (WHO for Guidelines for Diagnosis, Treatment, Prevention & Control, 2009). As many as 100 million people are infected yearly. There are no vaccines available to prevent dengue virus infection. Therefore, early diagnosis of dengue and dengue serotypes is a vital step in patient management. Dengue virus envelope protein is a major structural glycosylated protein that forms homodimers on the virion surface. Each envelope protein is organised into three domains, the central domain DI, the dimerization domain DII and an immunoglobulin-like domain DIII. Envelope protein DIII is reported to be a receptor-recognition and binding domain, and an important target for the human immune response (Matsui, K et al). The DIII domain is highly immunogenic and elicits the production of neutralising antibodies against the wild-type virus.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Molecular Mass	115 kDa
Purity	>95% purity as determined by SDS-PAGE.
Formulation	20mM Carbonate buffer pH9.6.
Applications	Suitable for use in ELISA, Western blotting and lateral flow assays.
Notes	This product is intended for research and manufacturing uses only. It is not a diagnostic device. The user assumes all responsibility for care, custody and control of the material, including its disposal, in accordance with all regulations.
Type	Recombinant
ClassID 1	Infectious Disease

GENE INFORMATION

Synonyms	DENV Serotype 3 DIII Envelope

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA