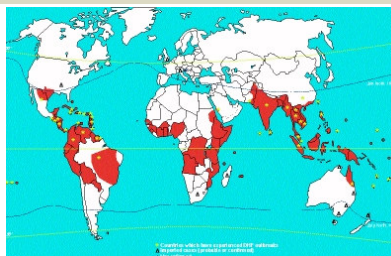
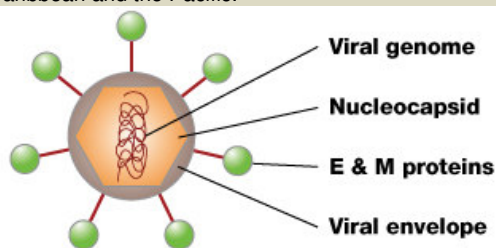
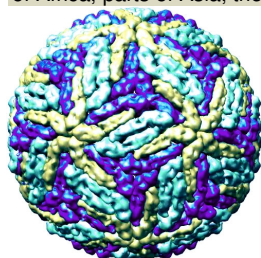


Dengue Virus Vaccines: Antibody ELISA Kits, Recombinant Proteins, Peptides and Antibodies

Dengue fever, also known as break bone fever, is an infectious tropical disease caused by the dengue virus. The term dengue fever came into general use only after 1828. The word dengue is Spanish for "affectation," "careful," or "fastidious." The term probably described the cautious, stiff movements of patients suffering from the muscle, bone, and joint pain caused by dengue fever. Some researchers believe that the name came from a Swahili phrase Ka dinga pepo, or a disease caused by an evil spirit. Dengue symptoms include fever, headache, muscle and joint pains, and a characteristic skin rash that is similar to measles. In a small proportion of cases the disease develops into the life-threatening dengue hemorrhagic fever (DHF), resulting in bleeding, low levels of blood platelets and blood plasma leakage, or into dengue shock syndrome, where dangerously low blood pressure occurs. Dengue is transmitted by several species of mosquito within the genus *Aedes*, principally *A. aegypti*. The virus has four different but related types 1-4 (Den1-4); infection with one type usually gives lifelong immunity to that type, but only short-term immunity to the others. Subsequent infection with a different type increases the risk of severe complications. There are up to 100 million cases of dengue fever worldwide every year; the most common occurrences are in urban parts of subtropical and tropical areas, such as Central and South America, parts of Africa, parts of Asia, the Caribbean and the Pacific.



Dengue fever virus (DENV) is an RNA virus of the family *Flaviviridae*; genus *Flavivirus*. Other members of the same genus include yellow fever virus, West Nile virus, St. Louis encephalitis virus, Japanese

encephalitis virus, tick-borne encephalitis virus, Kyasanur forest disease virus, and Omsk hemorrhagic fever virus. Most are transmitted by arthropods (mosquitoes or ticks), and are therefore also referred to as arboviruses (arthropod-borne viruses). The dengue virus genome code for the three different types of protein molecules (**C**, **prM** and **E**) that form the virus particle and seven other types of protein molecules (NS1, NS2a, NS2b, NS3, NS4a, NS4b, NS5) that are only found in infected host cells and are required for replication of the virus. The diagnosis of dengue is typically made clinically, on the basis of reported symptoms and physical examination; this applies especially in endemic areas. Additional lab tests include cell culture, PCR, and antibody detection by ELISA. As there is **no approved Dengue vaccine**, prevention is sought by reducing the habitat and the number of mosquitoes and limiting exposure to bites. A number of vaccines are undergoing testing. The most developed is based on a weakened combination of the yellow fever virus and each of the four dengue serotypes.

ADI has developed antibody ELISA kits to determine the efficacy of Dengue vaccines. Recombinant proteins and antibodies to DEN1-4 are also available to facilitate research on Dengue vaccine.

Dengues Vaccine Related ELISA kits

Items Description	Species	Antibody Type IgG Cat#	Antibody Type IgM Cat#
Dengue Virus Vaccine Antibody ELISA kits (detect antibodies to whole viral proteins)	Human	540-100-DHG	540-110-DHM
	Mouse	540-120-DHG	540-130-DHM

Type	Catalog#	Product Description	Product Type
DEN-1	RP-1594	Recombinant (E. coli) Dengue Virus Type 1 E Antigen (DENV E), antigen grade (>95% pure)	Pure protein
	RP-1601	Recombinant (E. coli, his-tag) Dengue Virus NS1, Type 1 protein, full length	Pure protein
	RP-1605	Recombinant (E. coli) Dengue Virus Type 1 envelop protein (D-III), pure (>95%)	Pure protein
	RP-1608	Recombinant (E. coli) Dengue Virus Type 1 N-terminus envelop immunodominant regions, pure (>95%)	Pure protein
	RP-344	Recombinant Dengue Virus NS3 Type 1 protein	Pure protein
DEN-2	AB-14310	Mouse Anti-Dengue Type 2 (envelop) IgG, aff pure	Antibodies
	AB-22122	Monoclonal Anti-Dengue Virus Type 2, NS1 glycoprotein, culture medium	Antibodies
	RP-1595	Recombinant (E. coli) Dengue Virus Type 2 E Antigen (DENV E), antigen grade (>95% pure)	Pure protein
	RP-1607	Recombinant (E. coli, his-tag) Dengue Virus NS1 Type 2 immunodominant protein	Pure protein
	RP-1620	Recombinant (E. coli, his-tag) Dengue Virus NS1, Type 2 protein	Pure protein
	RP-345	Recombinant Dengue Virus NS1 c-end Type 2 protein	Pure protein
	RP-346	Recombinant (E. coli, GST-tag) Dengue Virus NS1 n-end Type 2 protein	Pure protein
	RP-1598	Recombinant (E. coli) Dengue Virus Type 2 (and epitopes for type 1, 2, and 3) E Antigen (DENV E)	Pure protein
DEN-3	RP-1596	Recombinant (E. coli) Dengue Virus Type 3 E Antigen (DENV E), antigen grade (>95% pure)	Pure protein
	RP-1600	Recombinant (E. coli, his-tag) Dengue Virus NS1, Type 3 protein, full length	Pure protein
	RP-1603	Recombinant (E. coli) Dengue Virus Type 3 envelop protein (D-III), pure (>95%)	Pure protein
DEN-4	RP-1597	Recombinant (E. coli) Dengue Virus Type 4 E Antigen (DENV E), antigen grade (>95% pure)	Pure protein
	RP-1599	Recombinant (E. coli, his-tag) Dengue Virus NS1, Type 4 protein, full length	Pure protein
	RP-1604	Recombinant (E. coli) Dengue Virus Type 4 envelop protein (D-III), pure (>95%)	Pure protein
DEN1-4	AB-21120	Rabbit Anti-Dengue Type 1-4 viruses antiserum	Antibodies
	AB-21121	Monoclonal Anti-Dengue Virus Type 1-4 (pan, E antigen) IgG	Pure protein
	RP-1602	Recombinant (E. coli) Dengue Virus Type 1+4, 2, and 3 envelop proteins antigen grade (>95% prue)	Pure protein
	RP-1606	Recombinant (E. coli) Dengue Virus Type 1-4 envelop+NS domains, pure (>95%)	Pure protein