

**Product Data Sheet**  
**Chikungunya Virus Protein**

**Cat #** CHIKE15-R-10

Recombinant (sf9) Chikungunya virus (CHIKV) E1 protein (Wild-type, ectodomain)

**Size:** 10 ug

Chikungunya is an infection caused by the chikungunya virus. The disease features the sudden onset of fever two to four days after exposure. The fever usually lasts two to seven days, while accompanying joint pains typically last weeks or months but sometimes years. The mortality rate is a little less than 1 in 1,000; the elderly or those with underlying chronic medical problems are most likely to have severe complications.

The virus is passed to humans by two species of mosquito of the genus *Aedes*: *A. albopictus* and *A. aegypti*. It is an RNA virus that belongs to the alphavirus genus of the family *Togaviridae*. The name "chikungunya" derives from a word in the Kimakonde language, meaning "to become contorted", and describes the stooped appearance of sufferers with joint pain (arthralgia). Animal reservoirs of the virus include monkeys, birds, cattle, and rodents. This is in contrast to dengue, for which primates are the only hosts. Since 2004, the disease has occurred in outbreaks in Asia, Europe and the Americas.

The best means of prevention is overall mosquito control and the avoidance of bites by mosquitoes in areas where the disease is common. This may be partly achieved with the use of mosquito nets. No specific treatment is known, but supportive care is recommended, including rest, fluids, and medications to reduce fever and joint pain. The word is from Makonde for "that which bends up".

**Source of Antigen**

Recombinant protein was expressed in SF9 insect cells (Baculovirus recombinant protein).

**Form & Storage of Protein**

The recombinant protein is supplied in PBS 0.1% azide (lot sp. conc on the vial).

**Storage**

**Short-term:** unopened, undiluted vials for 1-2 weeks at 4oC.

**Long-term:** at -20oC or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20oC or below.

**Shipping:** 4oC for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting:** Users must optimize antibody dilution depending upon the nature of samples and other technical conditions. Good detection when using antibody at 0.5 ug/mL

**ELISA:** Assay-dependent dilution. (1:10-50K; using 50-100 ng antigen/well).

**References:** Powers AM (2007). *J. Gen. Virol.* 88 (Pt 9): 2363-77; Sourisseau M (2007) *PLoS Pathog.* 3 (6): e89. Schilte C (2013). *PLoS neglected tropical diseases* 7 (3): e2137

*\*This product is for in vitro research use only.*

| Catalog#                            | Prod Description   |
|-------------------------------------|--|
| 530-400-CHG                         | Human Anti-Chikungunya virus (CHIKV) IgG capture ELISA kit, 96 tests, semi-Quantitative                                  |
| 530-410-CHM                         | Human Anti-Chikungunya virus (CHIKV) IgM capture ELISA kit, 96 tests, semi-Quantitative                                  |
| 530-420-CEG                         | Human Anti-Chikungunya virus E1 (CHIKV-E1) IgG ELISA kit, 96 tests, Quantitative   |
| 530-430-CEM                         | Human Anti-Chikungunya virus E1 (CHIKV-E1) IgM ELISA kit, 96 tests, Quantitative   |
| 530-440-CEG                         | Mouse Anti-Chikungunya virus E1 (CHIKV-E1) IgG ELISA kit, 96 tests, Quantitative   |
| 530-450-CEM                         | Mouse Anti-Chikungunya virus E1 (CHIKV-E1) IgM ELISA kit, 96 tests, Quantitative   |
| 530-460-CEG                         | Monkey Anti-Chikungunya virus E1 (CHIKV-E1) IgG ELISA kit, 96 tests, Quantitative  |
| 530-470-CEM                         | Monkey Anti-Chikungunya virus E1 (CHIKV-E1) IgM ELISA kit, 96 tests, Quantitative  |
| 530-510-CEM                         | Human Anti-Chikungunya virus E1 (CHIKV-E1) IgM ELISA kit, 96 tests, Quantitative   |
| 530-540-CEG                         | Monkey Anti-Chikungunya virus E1 (CHIKV-E1) IgG ELISA kit, 96 tests, Quantitative  |
| 530-550-CEM                         | Monkey Anti-Chikungunya virus E1 (CHIKV-E1) IgM ELISA kit, 96 tests, Quantitative  |
| CHIKC35-R-10                        | Recombinant (E. coli) Chikungunya virus (CHIKV) capsid protein (>95%, ~35 kda, his-tag) for ELISA/Western                |
| CHIKE11-A                           | Anti-Chikungunya virus (CHIKV) E1 protein IgG  |
| CHIKE12-M                           | Mouse Monoclonal Anti-Chikungunya virus (CHIKV) E1 protein IgG, aff pure   |
| CHIKE15-R-10                        | Recombinant (sf9) Chikungunya virus (CHIKV) E1 protein (Wild-type, ectodomain, 415-aa>95%, his-tag) for ELISA/Western    |
| CHIKE16-R-10                        | Recombinant (sf9) Chikungunya virus (CHIKV) E1 protein (A226V Mutant ectodomain, 415aa, >95%, his-tag) for ELISA/Western |
| CHIKE21-A                           | Anti-Chikungunya virus (CHIKV) E2 protein IgG  |
| CHIKE25-R-10                        | Recombinant (E. coli) Chikungunya virus (CHIKV) E2 protein (>95%, ~45 kda, his-tag) for ELISA/Western                    |
| CHIKE31-A                           | Anti-Chikungunya virus (CHIKV) Capsid protein IgG  |
| CHIKV11-M                           | Mouse Monoclonal Anti-Chikungunya virus (CHIKV) IgG,   |
| CHIKV12-M                           | Mouse Monoclonal Anti-Chikungunya virus (CHIKV) IgG,   |
| CHIKE15-R-10-Chikungunya-E1-protein | 160805A  |