

Product Datasheet

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Recombinant Influenza Envelope Protein E2 (strain SL-CK1)

Recombinant Protein *excellence in early discovery research™*

Products are for research use only. Not for use in diagnostic or therapeutic procedures.

410 Axminster Dr, St. Louis, MO 63026

(800) 538-1145

leincoglobal@leinco.com

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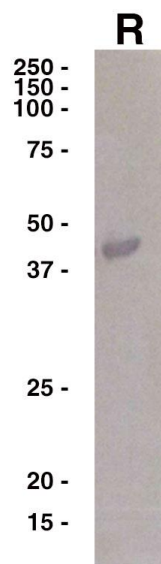
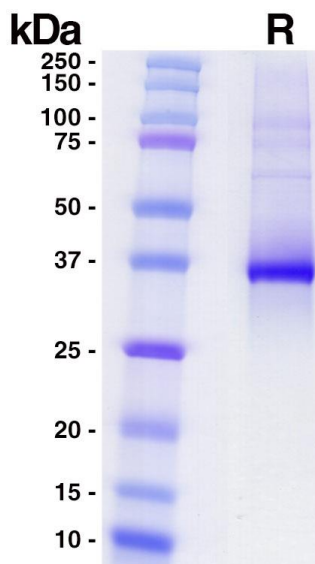
Product Information

Product No.: C446

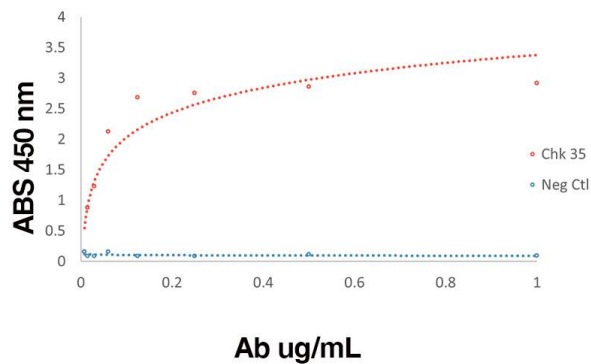
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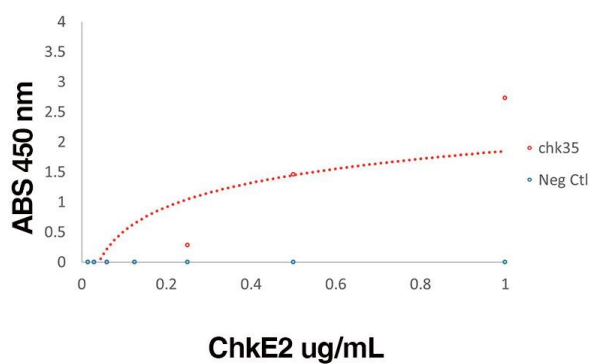
Pkg Size:



Chikungunya E2



Anti-Chikungunya E2



Product Description

Background:

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Chikungunya virus (CHIKV) is a mosquito-transmitted alphavirus that causes epidemics globally and has been declared a notable disease by the Centers for Disease Control and Prevention^{1, 2}. Symptoms include high fever, myalgia, rash, and severe polyarthrititis which can persist for long after acute infection. CHIKV is an enveloped virus with an 11.8-kb single-stranded, positive-sense RNA genome with two open reading frames^{3, 4}. There are three main genotypes, having 95.2 to 99.8% amino acid identity: Asian, West African, and East/Central/South African (ECSA). The mature CHIKV virion is comprised of a nucleocapsid protein C and two glycoproteins, E1 and E2⁵. E1 participates in virus fusion. E2 functions in attachment to cells. E1 and E2 form 80 trimeric spikes on the virus surface⁶. E2 localizes to the top of the spike and contains three domains: N-terminal domain A (center), domain B (tip), and C-terminal domain C (proximal to the viral membrane)⁵.

The SL-CK1 CHIKV strain was isolated from an epidemic in Sri Lanka in 2007 from a human source and has been fully sequenced (Genbank ID HM045801.1)⁷. Residue 18 of strain SL-CK1 E2 is a histidine⁸. This residue is an important determinant of virus fitness in mosquito cells.

Soluble recombinant CHIKV E2 protein has been used to generate monoclonal antibodies⁵.

Expression Host:
HEK-293 Cells

Format:
Purified No Carrier Protein

Formulation

Lyophilized from 0.01M Phosphate Buffered Saline (150mM NaCl)(PBS) pH 7.4, with 5% Trehalose and 10mM DTT

Purity
≥90% by SDS PAGE

Endotoxin
<1.0 EU/μg

Storage and Stability

1 month, 2 to 8 °C. Sterile conditions after opening and reconstitution. 1 year from date of receipt, -20 to -80 °C as supplied 3 months from date of receipt, -20 to -80 °C. Sterile conditions after opening and reconstitution.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

ELISA,
Western Blot

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Country of Origin

USA



References

1. Barrera, R., Hunsperger, E., Lanciotti, RS. et al. Preparedness and response for chikungunya virus introduction in the Americas. Pan American Health Organization; National Center for Emerging and Zoonotic Infectious Diseases (U.S.). Division of Vector-Borne Diseases. 2011.
2. Silva, JVI Jr., Ludwig-Begall, LF., Oliveira-Filho, EF. et al. Acta Trop. 188:213-224. 2018.
3. Powers, AM., Brault, AC., Tesh, RB. et al. J. Gen. Virol. 81:471–479. 2000.
4. Arankalle, VA., Shrivastava, S., Cherian, S. et al. J. Gen. Virol. 88:1967–1976. 2007.
5. Pal, P., Dowd, KA., Brien, JD. et al. PLoS Pathog. 9(4):e1003312. 2013.
6. Mukhopadhyay, S., Zhang, W., Gabler, S. et al. Structure. 14(1):63-73. 2006.
7. Volk SM, Chen R, Tsetsarkin KA, et al. J Virol. 84(13):6497-504. 2010.
8. Jupille HJ, Medina-Rivera M, Hawman DW, et al. J Virol. 87(10):5970-84. 2013.

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