SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

PRODUCT INFORMATION

Rift Valley Fever Virus L Protein (TAN/Dod-002/07) (recombinant)

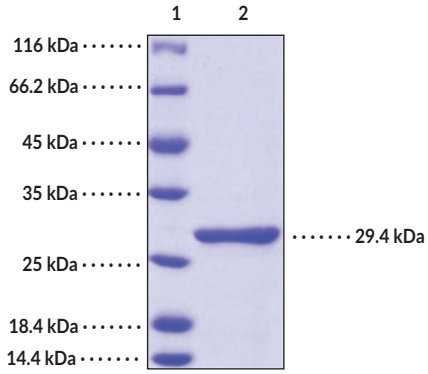
Item No. 40856

Overview and Properties

Synonym:	RVFV RNA-directed RNA Polymerase L
Source:	Recombinant RVFV C-terminal His-tagged L protein expressed in *E. coli*
Amino Acids:	1-250
Uniprot No.:	F4ZDJ3
Molecular Weight:	29.4 kDa
Storage:	-80°C (as supplied)
Stability:	≥1 year
Purity:	≥90% estimated by SDS-PAGE
Supplied in:	Lyophilized from sterile PBS, pH 7.4
Protein Concentration:	***batch specific*** mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: Rift Valley Fever Virus L Protein (TAN/Dod-002/07)

SDS-PAGE Analysis of Rift Valley Fever Virus L Protein (TAN/Dod-002/07). This protein has an apparent molecular weight of 29.4 kDa.

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION

Description

Rift Valley fever virus (RVFV) is a single-stranded negative-sense RNA virus, member of the *Phlebovirus* genus, and mosquito-transmitted pathogen endemic to sub-Saharan Africa and the Arabian peninsula.[1-3] The tripartite RNA genome of RVFV is composed of three segments: L, which encodes L protein, a single-polypeptide RNA-dependent RNA polymerase (RdRp), M, which encodes a single open reading frame (ORF) that produces the envelope glycoproteins Gn and Gc and non-structural proteins NSm and Gn/NSm fusion protein, and S, which is ambisense, encoding the nucleoprotein N in the genomic sense orientation, and the non-structural protein and major virulence factor NSs in the antigenomic orientation.[1,2] RVFV L protein is composed of an N-terminal endonuclease domain linked to a PA-C-like domain, an RdRp core, a PB2-N-like domain, a CBD domain, and a C-terminal lariat domain.[4] The N-terminal endonuclease domain is essential for cap-snatching during host mRNA transcription, and the RdRp core is essential for viral RNA production. Expression of a dominant-negative L protein mutant inhibits viral gene expression in RVFV-infected BHK/T7-9 cells.[5] Cayman's Rift Valley Fever Virus L protein (TAN/Dod-002/07) (recombinant) consists of 256 amino acids and has a calculated molecular weight of 29.4 kDa.

References

1. Faburay, B., Wilson, W., McVey, D.S., *et al.* Rift Valley fever virus structural and nonstructural proteins: recombinant protein expression and immunoreactivity against antisera from sheep. *Vector Borne Zoonotic Dis.* **13(9)**, 619-629 (2013).
2. Gaudreault, N.N., Indran, S.V., Balamaran, V., *et al.* Molecular aspects of Rift Valley fever virus and the emergence of reassortants. *Virus Genes* **55(1)**, (2019).
3. Wang, X., Hu, C., Ye, W., *et al.* Structure of Rift Valley fever virus RNA-dependent RNA polymerase. *J. Virol.* **96(3)**, e0171321 (2022).
4. Alamri, M.A., Mirza, M.U., Adeel, M.M., *et al.* Structural elucidation of Rift Valley fever virus L protein towards the discovery of its potential inhibitors. *Pharmaceuticals (Basel)* **15(6)**, 659 (2022).
5. Jung, B.-K., An, Y., Park, J.-E., *et al.* Development of a recombinant vaccine containing a spike S1-Fc fusion protein induced protection against MERS-CoV in human DPP4 knockin transgenic mice. *J. Virol. Methods* **299**, 114347 (2022)..

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM