

# Ebola virus VP 40 (FE18): sc-51872

## BACKGROUND

Ebola virus is an enveloped, negative-stranded RNA virus which belongs to the family *Filoviridae* and has a distinctive morphology similar only to that of Marburg virus, but apparently has no antigenic characteristics of Marburg virus. Ebola virus is one of at least 18 known viruses capable of causing the viral hemorrhagic fever syndrome. Its genome is a nonsegmented RNA strand with seven structural proteins which include the major nucleoprotein (NP), glycoprotein (GP) and L protein, in addition to four other proteins: VP40, VPX, VP30 and VP24. All the proteins are encoded by monocistronic mRNA transcripts complementary to virion RNA. Only GP, the major protein of the surface spikes, is glycosylated.

## REFERENCES

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2. Bray, M. and Geisbert, T.W. 2005. Ebola virus: the role of macrophages and dendritic cells in the pathogenesis of Ebola hemorrhagic fever. *Int. J. Biochem. Cell Biol.* 37: 1560-1566.
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8. Johnson, R.F., Bell, P. and Harty, R.N. 2006. Effect of Ebola virus proteins GP, NP and VP35 on VP40 VLP morphology. *Virol. J.* 3: 31.
9. Watanabe, S., Noda, T. and Kawaoka, Y. 2006. Functional mapping of the nucleoprotein of Ebola virus. *J. Virol.* 80: 3743-3751.

## SOURCE

Ebola virus VP40 (FE18) is a mouse monoclonal antibody raised against formalin inactivated Zaire strain of Ebola virus.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Ebola virus VP40 (FE18) is recommended for detection of VP40 of Ebola virus by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); may cross-react with VP40 of Marburg virus origin.

Molecular Weight of Ebola virus VP40: 38 kDa.

## SELECT PRODUCT CITATIONS

1. Yu, D.S., Weng, T.H., Hu, C.Y., Wu, Z.G., Li, Y.H., Cheng, L.F., Wu, N.P., Li, L.J. and Yao, H.P. 2018. Chaperones, membrane trafficking and signal transduction proteins regulate zaire Ebola virus trVLPs and interact with trVLP elements. *Front. Microbiol.* 9: 2724.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.