# Vaccinia Virus (TV43): sc-66108



The Power to Question

#### **BACKGROUND**

Vaccinia Virus belongs to the poxvirus family of viruses. It contains double-stranded DNA and was used as a vaccine to eradicate the smallpox disease. Fusion protein plays an important role in the entry of intracellular enveloped virus (IEV) into cells. In Vaccinia Virus, the fusion process is attributed to the action of a protein, which is encoded by the Vaccinia Virus A27L gene. This protein plays an important role in the biology of the virus, acting in virus-to-cell and cell-to-cell fusions. The protein is required for the microtubule-dependent transport of intracellular mature virus particles and for the process of envelopment that leads to IEV formation. The N-terminus of this protein recognizes heparan sulfate on the cell surface and interacts with the negative charges of sulfates of glycosaminoglycans (GAGs). Therefore, antibodies that recognize this protein are able to neutralize Vaccinia Virus infection and to identify other viral and cellular proteins, which participate in the Vaccinia Virus entry process.

# **REFERENCES**

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# **SOURCE**

Vaccinia Virus (TV43) is a mouse monoclonal antibody raised against Vaccinia Virus.

#### **PRODUCT**

Each vial contains 100  $\mu g$   $lgG_{2a}$  in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

Vaccinia Virus (TV43) is recommended for detection of Vaccinia Virus by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); may cross-react with Smallpox Virus.

Molecular Weight of Vaccinia Virus: 14 kDa.

# **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 for detailed protocols and support products.

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