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Anti 14-KDa Vaccinia virus fusion protein, Rabbit-Polyclonal Antibody

Catalog No. GB-10397 **Quantity:** 100μg **Applications:** ELISA
Antigen species: Vaccinia virus **Reactivity:** Vaccinia virus
Host species: Rabbit **Form:** Protein A affinity purified antibody

Target description

Fusion protein plays an important role when enveloped virus entry into cells. Vaccinia virus has a wide host range, it is conceivable that certain cellular components that are ubiquitously expressed on cell mediate virus infection[(2)]. During vaccinia virus infection, the fusion process is attributed to the action of the 14-KDa protein (encoded by the A27L). N-terminal of 14-KDa protein can identify the heparan sulfate of cell surface. It interacts with the negative charges of sulfates of glycosaminoglycans (GAGs) Therefore, the antibodies that recognized 14KDa protein were able to neutralize vaccinia virus infection and enable the investigator to identify other viral and cellular proteins which participate in the vaccinia virua entry process [(2,3)].

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide containing amino acids on the predicted N-terminal of fusion protein (A27L) in vaccinia virus.

Application

The antibody specificity was assayed by ELISA with the synthetic peptide antigen. The antibody titer is more than 10^8K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/50,000 dilution for ELISA, 1/10,000 dilution for Western blot analysis (WB) of recombinant protein.

Related Products

1. Anti-14K vaccinia Virus fusion protein pAb (GB-10396).
2. Anti-vaccinia Virus H3L rabbit pAb (GB-10432).

Ab dilution	Pre-bleed	Purified-Ab
1:10,000	0.143	2.569
1:100,000	0.107	1.875
1:1,000,000	0.103	1.824
1:10,000,000	0.099	0.942
1:100,000,000	0.098	0.272
Titer		>10^8K

ELISA Protocol

Antigen is coated on EIA strips at 1μg per well. Add 200μl of blocking buffer and then wash wells with PBST buffer. Antiserum or purified antibody GB-10397 is diluted in series as 10^2~10^6 folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plates and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of target antibody minus pre-bleed serum.

Storage

It is supplied as protein A affinity purified antibody in lyophilized powder. Redissolve the powder with 100 microliter sterile water will restore to the original concentration 1mg/mL(1× PBS). Store at 4°C for short-term application. For long-term storage, aliquot and store at -20°C.

References

1. Mari´a-Isabel, Va´zquez, and Mariano Esteban, 1999. Identification of functional domains in the 14-kilodalton envelope Protein A27L of Vaccinia Virus. *J. Virol.* 73:9098-9109.
2. Hsiao, J.C., Chung, C.S., and Chang, W., 1998. Cell surface proteoglycans are necessary for A27L Protein-Mediated Cell Fusion: Identification of the N-Terminal Region of A27L Protein as the Glycosaminoglycan-Binding Domain. *J. Virol.* 72:8374-8379.
3. Chung, C.S., Hsiao, J.C., Chang, Y.S., and Chang, W., 1998. 27L Protein Mediates Vaccinia Virus Interaction with Cell Surface Heparan Sulfate. *J. Virol.* 72:1577-1585.