## Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) (MALS verified)





#### Source

Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) is a chimeric monoclonal antibody recombinantly expressed from HEK293, which combines the variable region of a mouse monoclonal antibody with Human constant domain.

#### Clone

3H9

#### **Isotype**

Human IgG1 | Human Kappa

#### Conjugate

Unconjugated

## **Antibody Type**

Recombinant Monoclonal

## Reactivity

Virus

#### Immunogen

Recombinant Monkeypox virus (strain Zaire-96-I-16) A29L derived from human 293 cells.

## **Specificity**

This product is a specific antibody specifically reacts with A29L (MPXV).

# **Application**

Application	Recommended Usage
ELISA	0.5-125 ng/mL

# **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Purification**

Protein A purified/ Protein G purified

#### **Formulation**

Lyophilized from 0.22  $\mu m$  filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### **Storage**

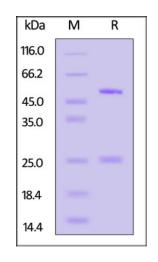
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

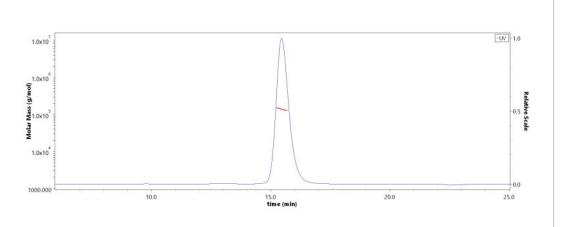
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



# **SEC-MALS**





## Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) (MALS verified)

Catalog # A2L-M577

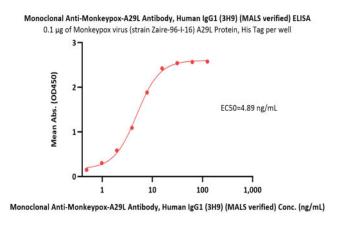


Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

The purity of Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) (Cat. No. A2L-M577) is more than 90% and the molecular weight of this protein is around 130-150 kDa verified by SEC-MALS.

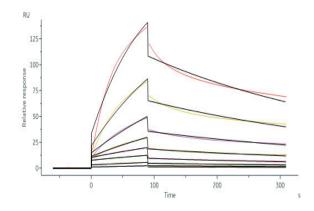
Report

## **Bioactivity-ELISA**



Immobilized Monkeypox virus (strain Zaire-96-I-16) A29L Protein, His Tag (Cat. No. A2L-M52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) (MALS verified) (Cat. No. A2L-M577) with a linear range of 0.5-16 ng/mL (QC tested).

# **Bioactivity-SPR**



Monoclonal Anti-Monkeypox-A29L Antibody, Human IgG1 (3H9) (Cat. No. A2L-M577) captured on Protein A Chip can bind Monkeypox virus (strain Zaire-96-I-16) A29L Protein, His Tag (Cat. No. A2L-M52H3) with an affinity constant of 47.7 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

### Background

Monkeypox is a rare zoonosis caused by monkeypox virus, which has become the most serious orthpoxvirus and consists of complex double stranded DNA. The pathogenesis of monkeypox is that the virus invades the body from respiratory mucosa, multiplies in lymphocytes, and incurs into blood producing transient venereal toxemia. after the virus multiplies in cells, the cells can invade the blood and propagate to the skin of the whole body, causing lesions. A29L binds to cell surface heparin to promote fusion of viral membrane with host plasma membrane.

# **Clinical and Translational Updates**

