# Monkeypox virus (Democratic Republic of the Congo) A30L Protein, His Tag (MALS verified)

Catalog # A3L-M5244



#### Source

Monkeypox virus (Democratic Republic of the Congo) A30L Protein, His Tag (A3L-M5244) is expressed from human 293 cells (HEK293). It contains AA Gln 22 - Leu 146 (Accession # EPI\_ISL\_19093812, GISAID). Predicted N-terminus: His

#### **Molecular Characterization**

A30L(Gln 22 - Leu 146) EPI\_ISL\_19093812

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 16.0 kDa. The protein migrates as 25-33 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per  $\mu$ g by the LAL method.

# Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### 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

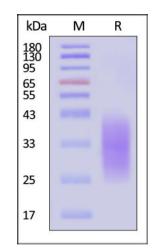
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

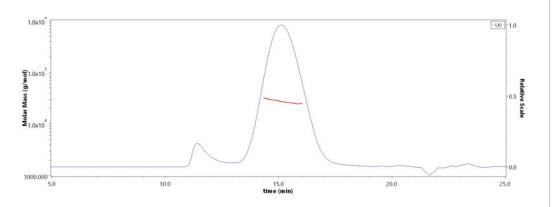
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Monkeypox virus (Democratic Republic of the Congo) A30L Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star</u>

# SEC-MALS



The purity of Monkeypox virus (Democratic Republic of the Congo) A30L Protein, His Tag (Cat. No. A3L-M5244) is more than 90% and the molecular weight of this protein is around 23-35 kDa verified by SEC-MALS. <u>Report</u>

# **Bioactivity-ELISA**

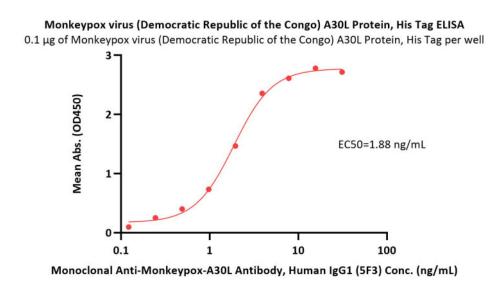


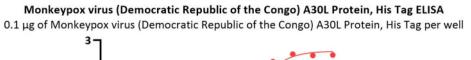


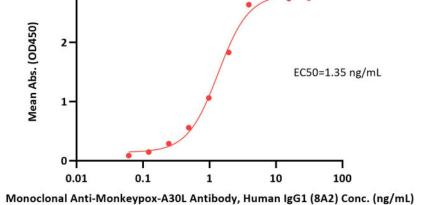




# Catalog # A3L-M5244







Immobilized Monkeypox virus (Democratic Republic of the Congo) A30LImmobilized MonkeyProtein, His Tag (Cat. No. A3L-M5244) at 1 µg/mL (100 µL/well) can bindProtein, His Tag (Cat. No. A3L-M5244) at 1 µg/mL (100 µL/well) can bindMonoclonal Anti-Monkeypox-A30L Antibody, Human IgG1 (5F3) with aMonoclonal Anti-Monkeypox-A30L Antibody, Human IgG1 (5F3) with alinear range of 0.1-4 ng/mL (QC tested).linear range of 0.064

Immobilized Monkeypox virus (Democratic Republic of the Congo) A30L Protein, His Tag (Cat. No. A3L-M5244) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Monkeypox-A30L Antibody, Human IgG1 (8A2) with a linear range of 0.06-4 ng/mL (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. A30L is a Envelope protein required for virus entry into host cell and for cell-cell fusion (syncytium formation).

# **Clinical and Translational Updates**



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