# Monkeypox virus (Democratic Republic of the Congo) H3L Protein, His Tag (MALS verified)

Catalog # H3L-M52H3



#### Source

Monkeypox virus (Democratic Republic of the Congo) H3L Protein, His Tag (H3L-M52H3) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Phe 282 (Accession # EPI\_ISL\_19093812, GISAID).

Predicted N-terminus: Met 1

#### **Molecular Characterization**

H3L(Met 1 - Phe 282) EPI\_ISL\_19093812

Poly-his

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

The protein has a calculated MW of 34.6 kDa. The protein migrates as 40-45 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### **Endotoxin**

Less than 1.0 EU per µg 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

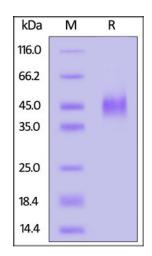
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

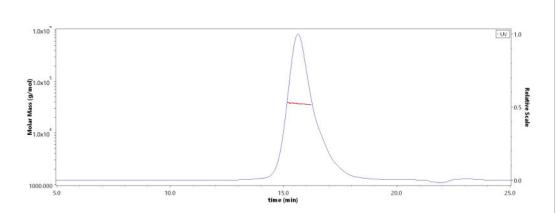
### **SDS-PAGE**



Monkeypox virus (Democratic Republic of the Congo) H3L 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%.

### **Bioactivity-ELISA**

### **SEC-MALS**



The purity of Monkeypox virus (Democratic Republic of the Congo) H3L Protein, His Tag (Cat. No. H3L-M52H3) is more than 90% and the molecular weight of this protein is around 30-45 kDa verified by SEC-MALS.

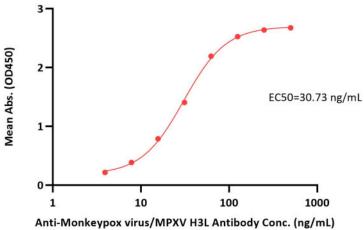
Report

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Monkeypox virus (Democratic Republic of the Congo) H3L Protein, His Tag ELISA 0.1  $\mu$ g of Monkeypox virus (Democratic Republic of the Congo) H3L Protein, His Tag per well



Immobilized Monkeypox virus (Democratic Republic of the Congo) H3L Protein, His Tag (Cat. No. H3L-M52H3) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-Monkeypox virus/MPXV H3L Antibody with a linear range of 4-63 ng/mL (QC 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. H3L is similar to Vaccinia virus strain Copenhagen H3L heparin binding surface protein (Cop-H3L) surface membrane protein. There are research reports H3L induced transcriptional perturbations and injuries.

## **Clinical and Translational Updates**

