Monkeypox virus (strain Zaire-96-I-16) A33R Protein, His Tag

Catalog # A3R-M52H5

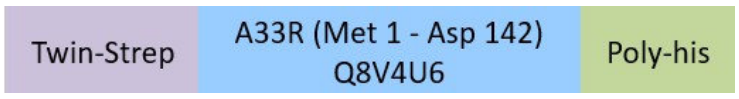
Synonym

A33R

Source

Monkeypox virus (strain Zaire-96-I-16) A33R Protein, His Tag(A3R-M52H5) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Asp 142 (Accession # Q8V4U6).
Predicted N-terminus: Trp

Molecular Characterization



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

The protein has a calculated MW of 88.7 kDa. The protein migrates as 90-100 kDa when calibrated against Star Ribbon Pre-stained Protein Marker 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.

Formulation

Lyophilized from 0.22 μm 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

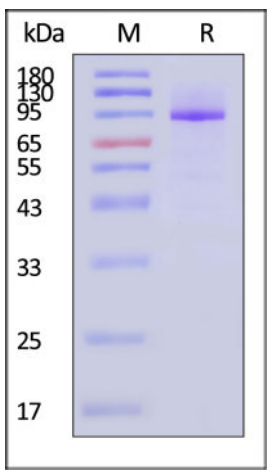
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

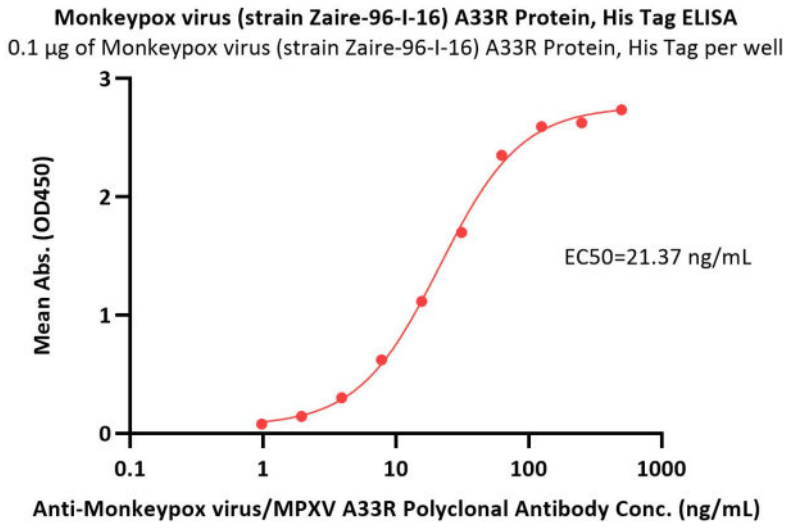
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Monkeypox virus (strain Zaire-96-I-16) A33R 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 Star Ribbon Pre-stained Protein Marker).

Bioactivity-ELISA



Immobilized Monkeypox virus (strain Zaire-96-I-16) A33R Protein, His Tag (Cat. No. A3R-M52H5) at 1 μg/mL (100 μL/well) can bind Anti-Monkeypox virus/MPXV A33R Polyclonal Antibody with a linear range of 1-63 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 cases are mostly in central and western Africa. 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.

Clinical and Translational Updates