Data Sheet (Cat.No.TMPH-03733)

TargetMol

Zaire ebolavirus (strain Kikwit-95) VP35 Protein (His & Myc)

General Information

Synonyms: Ebola VP35 (eVP35);Polymerase cofactor VP35;VP35

Protein Construction: 1-340 aa

Species: ZEBOV

Expression Host: HEK293 Cells

Accession: Q6V1Q9

Molecular Weight: 41.4 kDa (predicted)

AA Sequence: MTTRTKGRGHTAATTQNDRMPGPELSGWISEQLMTGRIPVSDIFCDIENNPGLCYASQMQQTKPNPKTRNS QTQTDPICNHSFEEVVQTLASLATVVQQQTIASESLEQRITSLENGLKPVYDMAKTISSLNRVCAEMVAKYDLL VMTTGRATATAAATEAYWAEHGQPPPGPSLYEESAIRGKIESRDETVPQSVREAFNNLDSTTSLTEENFGKPD ISAKDLRNIMYDHLPGFGTAFHQLVQVICKLGKDSNSLDIIHAEFQASLAEGDSPQCALIQITKRVPIFQDAAPP VIHIRSRGDIPRACQKSLRPVPPSPKIDRGWVCVFQLQDGKTLGLKI

QC Testing

Biological Activity: Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 90% as determined by SDS-PAGE.

Endotoxin: < 1.0 EU/μg of the protein as determined by the LAL method.

Formulation: Tris-based buffer

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Plays an essential role in viral RNA synthesis and also a role in suppressing innate immune signaling. Acts as a polymerase cofactor in the RNA polymerase transcription and replication complexes. Serves as nucleoprotein/NP

monomer chaperone prior to the formation of the large oligomeric RNA-bound complexes. Regulates RNA synthesis by modulating NP-RNA interactions and interacting with DYNLL1. VP35-NP interaction controls the switch between RNA-bound NP and free NP and thus the switch between genome replication and genome packaging into the nucleocapsid. Prevents establishment of cellular antiviral state, thereby suppressing host DC maturation. Acts by inhibiting host DDX58/RIG-I activation both by shielding dsRNA from detection and by preventing PRKRA binding to DDX58. Blocks virus-induced phosphorylation and activation of interferon regulatory factor 3/IRF3, a transcription factor critical for the induction of interferons alpha and beta. This blockage is produced through the interaction with and inhibition of host IKBKE and TBK1, producing a strong inhibition of the phosphorylation and activation of IRF3. Also inhibits the antiviral effect mediated by the host interferon-induced, double-stranded RNA-activated protein kinase EIF2AK2/PKR. Increases PIAS1-mediated SUMOylation of IRF7, thereby repressing interferon transcription. Also acts as a suppressor of RNA silencing by interacting with host DICER1, TARBP2/TRBP and PRKRA/PACT. As a dimer, binds and sequesters dsRNA contributing to the inhibition of interferon production.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481