

VP40 Protein, Zaire ebolavirus

Cat. No.:	HY-P702060
Synonyms:	VP40; Matrix protein VP40; Ebola VP40; eVP40; Membrane-associated protein VP40
Species:	Virus
Source:	E. coli
Accession:	Q05128 (N31-K326)
Gene ID:	911825
Molecular Weight:	

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	<p>The VP40 protein plays a vital role in virus particle assembly and budding, orchestrating complex interactions with both viral and host components. It engages in a multifaceted network by interacting with the viral ribonucleocapsid and various host proteins of the ESCRT system, including VPS4, PDCD6IP/ALIX, NEDD4, or TGS101, crucial for efficient budding. The association with host E3 ubiquitin ligase SMURF2 further facilitates virus budding. Additionally, VP40's involvement extends to immune cell dysfunction, as it can be packaged into exosomes, reducing the viability of recipient cells through RNAi suppression and exosome-bystander apoptosis. Existing in different oligomeric forms, such as homodimers, homohexamers critical for budding, and homooctamers involved in genome replication and RNA binding, VP40 exhibits dynamic structural transitions. Notably, its interaction with various host factors, including TSG101, NEDD4, PDCD6IP/ALIX, SMURF2, and ITCH, highlights the complexity of VP40-mediated processes, shedding light on its central role in the intricate machinery governing virus assembly and egress.</p>
------------	--

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA