

Coxsackievirus A16 VP1 Protein (295a.a, sf9, Fc)

Cat. No.:	HY-P76280
Synonyms:	Coxsackievirus A16 (Cox A16) (strain G-10) VP4 Protein; VP1 Protein; CV
Species:	Virus
Source:	Sf9 insect cells
Accession:	AAA50478 (G568-K862)
Gene ID:	1461111
Molecular Weight:	Approximately 59.5 kDa.

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 100 mM glycine, 10 mM NaCl, pH 7.0. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>Coxsackievirus A16 (CVA16) can cause hand-foot-and-mouth disease (HFMD), a common acute infectious disease. CVA16 is a small, non-enveloped, icosahedral particle containing a single-stranded, positive-sense viral RNA genome of approximately 7.4 kb in length. CVA16 can be cleaved by viral proteases into 4 structural (VP1 to VP4) and 7 nonstructural (2A to 2C, and 3A to 3D) proteins^[1]. Therefore, Coxsackievirus A16 VP1 Protein is one of the capsid subunit protein of cleaved CVA16. CVA16 interacts with its host receptors (cell surface heparan sulfate glycosaminoglycans and SCARB2, also known as LIMP-2 as its uncoating receptor) to enter into susceptible cells. Upon binding, CVA16 mature virions may transform to an uncoating intermediate state, termed the “135S-like particle” or “A-particle”, with the feature of expanded capsid, loss of pocket factor, and an enlarged two-fold opening^[2].</p>
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Caution: Product has not been fully validated for medical applications. For research use only.

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