

12-8401: Anti-Enterovirus 68, Capsid (Clone EV-D68-159) Purified No Carrier Protein

Clonality :	Monoclonal
Clone Name :	EV-D68-159
Application :	ELISA
Alternative Name :	EVD68, Enterovirus, VP1, VP3
Isotype :	Human IgG1

Description

Specificity: Clone EV-D68-159 is a human IgG monoclonal antibody specifically binds to VP1 and VP3 of Enterovirus D68, clade B.

Antigen Distribution: Enterovirus-D68 (EV-D68) can be found in human respiratory epithelial cells, gastrointestinal cells, and motor neurons within the spinal cord's grey matter?

Background: EV-D68 is a highly transmissible respiratory disease that primarily impacts children. It is among the 100-plus non-polio enteroviruses and is listed as a NIAID Biodefense Priority Pathogen. The respiratory condition can vary from mild (resembling a common cold) to more severe, potentially resulting in acute flaccid myelitis (AFM), a condition characterized by lasting muscle weakness. The majority of individuals with EV-D68 encounter mild symptoms and recuperate without significant complications¹. No vaccines are currently accessible for preventing EV-D68 infections, but practical measures can aid in lowering the chances of transmission. The virus is transmitted via respiratory secretions (saliva, nasal mucus, and sputum) when an infected individual coughs, sneezes or makes contact with surfaces subsequently touched by others². Clone EV-D68-159 light chain CDR1 and CDR3 bind to three residues on the C terminus of VP1 (Glu271, Arg272, and Asp285); however, the heavy chain CDR2 and CDR3 bind the N-terminal loop of VP3 before the B-? strand. The capsid is made up of four viral proteins (VP1, VP2, VP3, and VP4) that are crucial for the virus's ability to bind and enter host cells. Clone EV-D68-159 effectively binds and neutralizes clade B virus, preventing it from infecting cells and spreading⁴.

Product Info

Amount :	250 µg / 1 mg Purity :>=90% monomer by analytical SEC and SDS-Page
Purification :	Preparation : Recombinant antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates. Concentration:>=1.0 mg/ml
Content :	Formulation: This recombinant monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.
Storage condition :	This antibody may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at <= -70°C. Avoid Repeated Freeze Thaw Cycles.

Application Note

ELISA, EM, N