

12-8135: Anti-Rotavirus (Clone: RV6-25)

Clonality :	Monoclonal
Clone Name :	RV6-25
Application :	ELISA, FACS
Isotype :	Human IgG
Immunogen Information :	Human Mab RV6-25 was sequenced from RV-specific B cells isolated from the blood of healthy adult donors or RV-infected infants or adults.

Description

Reactivity Species : Rotavirus-Virus

Expression Host : HEK-293

Endotoxin Level : ≤ 1.0 EU/mg as determined by the LAL method

Specificity : RV6-25 activity is directed against the apical surface of the VP6 head domain. RV6-25 and RV6-26 are encoded by the same heavy chain variable segment, but unlike RV6-26, RV6-25 is unable to inhibit RV. Three-dimensional structural analyses of DLP: Fab complexes show that RV6-25 Fab molecules attach to the tops of VP6 trimers, at one VP6 subunit, with the epitope positioned along the edge and in close contact with the VP6 surface loop. The RV6-25 Fab protrudes from the VP6 trimers and extends away from the viral surface in a regular pattern depending on the position of the VP6 trimer in the VP6 layer¹

. Additionally, RV6-25 binds to the apical surface of the DLP VP6 head domain and does not obstruct the transcription pore. The Fab binds to epitopes on the distinct P, P', T, T', or D VP6 trimers.

Background : Rotaviruses (RV) are double-stranded, non-enveloped, icosahedral RNA viruses in the Reoviridae family that cause severe dehydrating diarrhea in infants and children. RV particles are composed of concentric viral protein (VP) layers. The triple-layered particle has an inner capsid layer (VP2), an intermediate capsid layer (VP6), and an outer capsid layer (VP7, VP4). The transcriptionally active double-layered particle (DLP) consists of VP2 and VP6. VP6 is the most antigenic RV protein in humans.

Product Info

Amount :	100 μ g
Purification :	$\geq 95\%$ monomer by analytical SEC
Content :	≥ 5.0 mg/ml 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.
Storage condition :	Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one year. For longer term storage, aseptically aliquot in working volumes without diluting and store at $\geq -70^\circ\text{C}$. Avoid Repeated Freeze Thaw Cycles.