Monoclonal Anti-Rotavirus A VP4 Antibody, Human IgG1 (4D2)

Catalog # VP4-M762

Source

Monoclonal Anti-Rotavirus A VP4 Antibody, Human IgG1 (4D2) is a chimeric monoclonal antibody recombinantly expressed in HEK293, which combines the variable region of a mouse monoclonal antibody with human constant domain.

Antibody Type

Recombinant Monoclonal

Clone

4D2

Isotype

Human IgG1, Kappa

Host Species

Mouse

Immunogen

Recombinant Rotavirus A (strain RVA/Human/United States/Wa/1974/G1P1A[8]) VP4 Protein is expressed from human 293 cells

Specificity

Specifically recognizes Rotavirus A VP4.

Purification

Protein A purified / Protein G purified.

Concentration

Please refer to the Certificate of Analysis (CoA).

Form

Lyophilized

Formulation

Lyophilized from a 0.22 μm-filtered solution in PBS (pH 7.4), with trehalose as protectant.

Please contact us for customized product forms or formulations.

Reconstitution

Please refer to the Certificate of Analysis (CoA) for specific instructions.

Shipping

Lyophilized product is shipped at ambient temperature.

Storage

For long term storage, the product should be stored in a lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

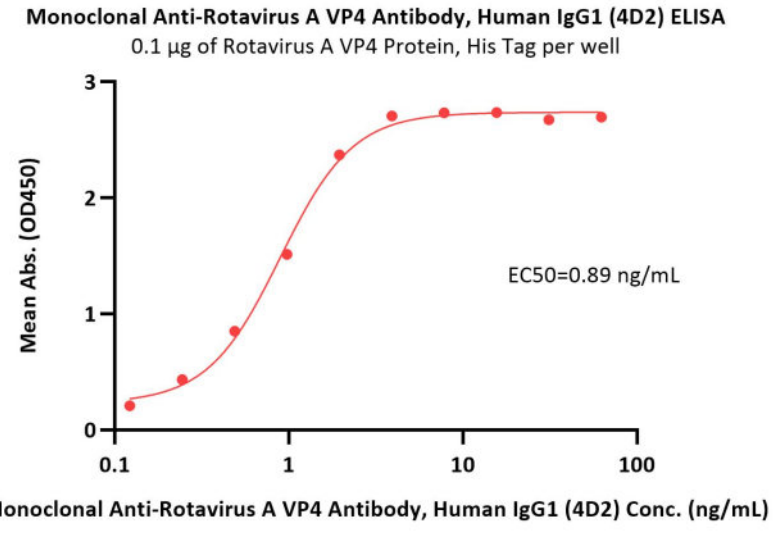
Notices

Product Specific Notices: For research use only.

ACRO Quality Management System

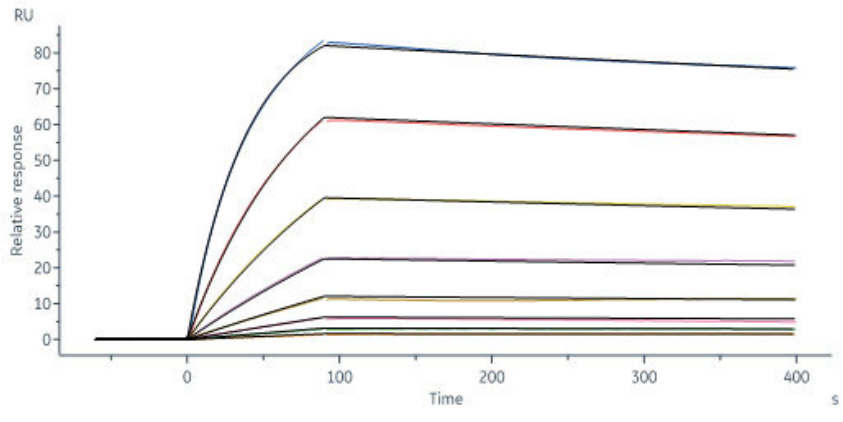
- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

Bioactivity-ELISA



Immobilized Rotavirus A VP4 Protein, His Tag (Cat. No. VP4-R5243) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-Rotavirus A VP4 Antibody, Human IgG1 (4D2) (Cat. No. VP4-M762) with a linear range of 0.1-2 ng/mL (QC tested).

Bioactivity-SPR



Monoclonal Anti-Rotavirus A VP4 Antibody, Human IgG1 (4D2) (Cat. No. VP4-M762) captured on Protein A Chip can bind Rotavirus A VP4 Protein, His Tag (Cat. No. VP4-R5243) with an affinity constant of 1.07 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Rotavirus is the leading cause of severe, watery diarrhea in infants and children less than 5 years old. It is estimated that around three-quarters of infants and children had rotavirus diarrhea before the age of 12 months and over millions of them were hospitalized due to the rotavirus infection. The rotavirus has various structural viral protein (VPs) and non-structural protein (NSPs), among them, the VP4 and VP7 together determines the serotypes of the virus, with the VP4 determines the P-type and VP-7 determines the G-type. The reassortment of these proteins leads to the diversity of the rotavirus strains, making the VP4 and VP7 the important target for vaccine studies.