



Rabbit Anti-Rotavirus Vp7 Polyclonal antibody [Biotin] (CABT-CS896)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Rotavirus VP7
Target	Rotavirus VP7
Immunogen	Recombinant Rotavirus A Outer capsid glycoprotein VP7 protein (51-326AA)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Rotavirus
Purification	Protein G
Conjugate	Biotin
Applications	ELISA
Format	Liquid
Size	100 µg
Buffer	50% Glycerol, 0.01M PBS, PH 7.4
Preservative	0.03% Proclin 300
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

BACKGROUND

Introduction

Rotavirus is a member of the family Reoviridae and is composed of 11 segments of double-stranded RNA surrounded by three concentric spherical protein coats. The 11 segments of double-stranded RNA code for both structural proteins, which compose three concentric protein layers that surround and protect the RNA, and nonstructural proteins, which are involved in viral replication. There are four major structural proteins that comprise the capsids of rotavirus: viral proteins (VPs) 2, 4, 6, and 7. The innermost layer is composed of VP2, the middle layer is composed of VP6, and the outermost layer is composed of glycoprotein VP7 and protease-sensitive VP4 spikes that emanate from VP7. Antibody responses following rotavirus infection are directed toward both structural and nonstructural proteins. VP6, the most prevalent protein in the rotavirus particle, is highly immunogenic. Antibodies to VP6 are nonneutralizing but induce protective immunity in some animal models. The outer capsid proteins VP4 and VP7 induce neutralizing antibodies. Epitope-specific antibodies to VP4 and VP7 correlate with protection from infection; however, there is conflicting evidence on the importance of VP4 and VP7 antibodies for protection.

Keywords

Rotavirus; Reoviridae; Sedoreovirinae; Rotavirus VP7; VP7
