



## **Anti- Capsid protein VP1 Polyclonal Antibody**

**Category:** Polyclonal Antibody

**Catalog #:** AB2A241

**Species Reactivity:** Norovirus Hu/Texas/TCH04-577/2004/US

### **Immunogen/Specificity:**

Polyclonal antibody produced in rabbits immunizing with a synthetic peptide corresponding to N-terminal residues of Norovirus Capsid protein VP1

**Description:** Capsid protein self assembles to form an icosahedral capsid with a T=3 symmetry, about 38 nm in diameter, and consisting of 180 capsid proteins. A smaller form of capsid with a diameter of 23 nm might be capsid proteins assembled as icosahedron with T=1 symmetry. The capsid encapsulate the genomic RNA and VP2 proteins. Capsid protein VP1 attaches virion to target cells by binding histo-blood group antigens present on gastroduodenal epithelial cells. Soluble capsid protein may play a role in viral immunoevasion. Capsid protein VP1 binds to histo-blood group antigens at surface of target cells. The shell domain (S domain) contains elements essential for the formation of the icosahedron. The Protruding domain (P domain) is divided into sub-domains P1 and P2. P domain interacts in dimeric contacts that increase the stability of the capsid and form the protrusions on the virion. An hypervariable region in P2 is thought to play an important role in receptor binding and immune reactivity.

### **Reference:**

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Marionneau,S., et al, *Gastroenterology* 122 (7), 1967-1977 (2002)  
Bertolotti-Ciarlet,A., et al, *J. Virol.* 77 (21), 11603-11615 (2003)  
Huang,P., et al, *J. Infect. Dis.* 188 (1), 19-31 (2003)  
Tan,M., et al, *J. Virol.* 80 (15), 7322-7331 (2006)  
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