

Recombinant Anti-aHEV CP Antibody (V3S-0522-YC4607)

Cat. No.: V3S-0522-YC4607

Summary

Description	This product is a monoclonal antibody derived from Mouse (<i>Mus musculus</i>), which can specifically recognize Avian hepatitis E virus Capsid protein. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Mouse
Target Species	Avian hepatitis E virus (aHEV)
Epitope	Located in the sequence: HQEWIYFLQNGSSVWYAYTNMLGQKSDTSILFEVRPIQASDQP WFLAHHTGGDDCTT.
Isotype	IgM

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 µM filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

Applications

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Application	ELISA; FuncS
Application Notes	The antibody is recommended for detection of aHEV CP by ELISA, FuncS assays.

Target

Target	aHEV CP
Alternative Name	aHEV CP; Avian hepatitis E virus Capsid protein; aHEV; Avian hepatitis E virus; Capsid protein; CP
Gene ID	18263428
UniProt	Q913Y7

Introduction

Avian HEV is a non-enveloped positive single stranded RNA virus with a genome size of approximately 6.6Kb excluding the 3' poly(A) tail. The genome organization of all HEV species is similar, with slight differences in the total length and position of the open reading frames (ORF) 1-3. Similar to mammalian HEV, the genome is mainly organized in 3 ORFs, with non-coding regions of 24 and about 130 nt at the 5'- and 3'-end, excluding a poly(A) tail, respectively. ORF1 is located at 5'-end and encodes a polyprotein containing methyltransferase, papain-like cysteine protease, helicase and RNA-dependent RNA polymerase. It overlaps neither with ORF2 nor ORF3 and includes a hypervariable region of around 50 amino acids in length. Following the stop codon of ORF1, there is a short non-coding region, which may play an important role in viral replication. ORF3, which partially overlaps with ORF2, encodes a small phosphoprotein. ORF1 and ORF3 encode non-structural proteins which play a very important role for the replication of the virus. ORF2 is located at the 3'-end of the genome and encodes the capsid protein with a length of 606 amino acids.

Research Area Microbiology

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.