



Anti-Coat Protein of Fish Nervous Necrosis virus, Rabbit-Polyclonal Antibody

Catalog No. GB-10063
Antigen species: Fish NNV
Host species: Rabbit

Quantity: 250 μ l
Reactivity: Fish NNV
Form: Antiserum

Applications tested: ELISA

Target description

Viral nervous necrosis (VNN) is a worldwide disease among marine fishes. Fish nervous necrosis virus (NNV) causes high mortality and considerable economic damage to the aquaculture industry. In Taiwan, VNN disease was first identified in 2 species of hatchery-reared grouper, *Epinephelus fuscogutatus* and *E. akaaya* in 1994. Since then, increasing mortalities have occurred among groupers *Epinephelus* spp., and also among European eels *Anguilla anguilla* L., yellow-wax pompano *Trachinotus falcatus*, firespot snapper *Lutjanus erythropterus* B., barramundi *Lates calcarifer*, cobias *Rachycentron canadum*, humpback groupers *Cromileptes altivelis* and Chinese catfish *Parasilurus asotus*.

Antigen

This polyclonal antibody was raised by immunizing rabbit with a synthetic peptide containing amino acids on central domain of coat protein of NNV (aa 150-210) of grouper NNV.

Application

The antibody titer is more than 80K for ELISA. It has not been tested in the other applications. However, for the first testing, we recommend 1/5,000 dilution for ELISA, 1/1000 dilution for Western blot analysis (WB) of recombinant protein, 1/400 dilution for tissue extracts or cell lysates, 1/100 dilution for immunohistochemistry (IHC) staining on frozen cryosections, 1/50 dilution for IHC staining on paraffin embedded sections.

Related Products

1. Anti-NNV coat protein rabbit pAb (GB-10064)
2. Anti-NNV particles rabbit pAb (PG-10002)

Ab dilution	Pre-bleed	Anti-serum
1:0.1K	0.106	0.878
1:1K	0.066	0.760
1:10K	0.064	0.271
1:100K	0.063	0.093
Titer		~83 K

ELISA Protocol

Antigen is coated on EIA strips at 1 μ g per well. Add 200 μ l of blocking buffer and then wash wells with PBST buffer. Antiserum GB-10063 is diluted in series as $10^2 \sim 10^5$ folds and added in separate wells. Incubate antibody for 1hr. Wash unbound antibodies and add anti-rabbit IgG-HRP conjugate. Wash the plate and add substrate to develop color for 5 min. Read absorbance (ABS) at 650 nm. Amount of color is directly proportional to the amount of antibodies. Antibody titer is defined as >0.1 of ABS of antiserum minus pre-bleed serum.

Storage

It is supplied as lyophilized serum. Redissolve the lyophilized powder with 250 microliter sterile water will restore the original condition. Store at 4 $^{\circ}$ C for short term application. For long-term storage, aliquot and store at -20 $^{\circ}$ C.

References

1. Chi SC, Shieh JR, Lin SJ. Genetic and antigenic analysis of betanodaviruses isolated from aquatic organisms in Taiwan. *Dis Aquat Organ*. 2003 Aug 4;55(3):221-8.
2. Chi SC, Lin SC, Su HM, Hu WW. Temperature effect on nervous necrosis virus infection in grouper cell line and in grouper larvae. *Virus Res*. 1999 Sep;63(1-2):107-14.