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Puumala Virus Nucleocapsid Antibody
Catalog # ASC11760

Specification

Puumala Virus Nucleocapsid Antibody - Product Information

Application	**E**
Primary Accession	P27313
Other Accession	ABO93592, 144228123
Reactivity	**Virus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**N/A KDa**
Application Notes	**Puumala virus nucleocapsid antibody can detect 10ng Puumala virus nucleocapsid peptide in ELISA at 1 µg/ml.**

Puumala Virus Nucleocapsid Antibody - Additional Information

Gene ID	**2943083**

Target/Specificity
PUUVsSgp1;

Reconstitution & Storage
Puumala virus nucleocapsid antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
Puumala Virus Nucleocapsid Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Puumala Virus Nucleocapsid Antibody - Protein Information

Name N

Function
Encapsidates the genome protecting it from nucleases (Probable). The encapsidated genomic RNA is termed the nucleocapsid (NC) and serves as template for transcription and replication (Probable). The nucleocapsid has a left-handed helical structure (By similarity). As a trimer, specifically binds and acts as a chaperone to unwind the panhandle structure formed by the viral RNA (vRNA) termini (By similarity). Involved in the transcription and replication initiation of vRNA by mediating primer annealing (By similarity). Plays a role in cap snatching by sequestering capped RNAs in P bodies for use by the viral RdRp during transcription initiation (By similarity). Substitutes for the cellular cap-binding complex (eIF4F) to preferentially facilitate the translation of capped mRNAs (By similarity). Initiates the translation by specifically binding to the cap and 40S ribosomal subunit (By similarity). Prevents the viral glycoprotein N (Gn) from autophagy-dependent breakdown maybe by blocking autophagosome formation (By similarity). Inhibits host EIF2AK2/PKR dimerization to prevent PKR-induced translational shutdown in cells and

thus the activation of the antiviral state (By similarity). Also displays sequence-unspecific DNA endonuclease activity (By similarity).

Cellular Location
Virion {ECO:0000250|UniProtKB:P05133}. Host cytoplasm, host perinuclear region. Host Golgi apparatus, host cis-Golgi network {ECO:0000250|UniProtKB:P05133} Note=Internal protein of virus particle {ECO:0000250|UniProtKB:P05133}

Puumala Virus Nucleocapsid Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Puumala Virus Nucleocapsid Antibody - Images

Puumala Virus Nucleocapsid Antibody - Background

Puumala virus (PUUV) is a rodent-borne hantavirus of the family Bunyaviridae, an enveloped, negative-sense RNA viruses with a tripartite genome that can cause hantavirus pulmonary syndrome (HPS) and is highly homologous to the protype hantavirus Hantaan virus (1). Like other hantaviruses, the PUUV glycoprotein is synthesized as a precursor that is posttranslationally processed into two glycoproteins G1 (Gn) and G2 (Gc). These glycoproteins interact with the PUUV nucleocapsid (NP) protein through their cytoplasmic tail, and this association has been suggested to be crucial to the binding of the ribonucleoprotein of the PUUV and the assembly of the virus particle (2).

Puumala Virus Nucleocapsid Antibody - References

Vapalahti O, Kallio-Kokko H, Salonen EM, et al. Cloning and sequencing of Puumala virus Sotkamo strain S and M RNA segments: evidence for strain variation in hantaviruses and expression of the nucleocapsid protein. J. Gen. Virol. 1992; 73:829-38.
Hepojoki J, Strandin T, Wang H, et al. Cytoplasmic tails of hantavirus glycoproteins interact with the nucleocapsid protein. J. Gen. Virol. 2010; 91:2341-50.