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Puumala Virus Glycoprotein Antibody
Catalog # ASC11759

Specification

Puumala Virus Glycoprotein Antibody - Product Information

Application	**E**
Primary Accession	P27312
Other Accession	AFQ60650, 402502305
Reactivity	**Virus**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**N/A KDa**
Application Notes	**Puumala virus glycoprotein antibody can detect 10ng Puumala virus glycoprotein peptide in ELISA at 1 µg/ml.**

Puumala Virus Glycoprotein Antibody - Additional Information

Gene ID	**2943082**

Target/Specificity
PUUVsMgp1;

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

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

Puumala Virus Glycoprotein Antibody - Protein Information

Name GP

Function
[Glycoprotein N]: Forms homotetramers with glycoprotein C at the surface of the virion (By similarity). Attaches the virion to host cell receptors including integrin ITGAV/ITGB3 (By similarity). This attachment induces virion internalization predominantly through clathrin-dependent endocytosis (By similarity). Mediates the assembly and budding of infectious virus particles through its interaction with the nucleocapsid protein and the viral genome (PubMed:24755564). May dysregulate normal immune and endothelial cell responses through an ITAM motif (By similarity). Translocates to mitochondria, binds to host TUFM and recruits MAP1LC3B (By similarity). These interactions induce mitochondrial autophagy and therefore destruction of host MAVS leading to inhibition of type I interferon (IFN) responses (By similarity). Concomitant breakdown of glycoprotein N is apparently prevented by the nucleoprotein that may inhibit Gn-stimulated autophagosome-lysosome fusion (By similarity). Interacts with the viral genomic RNA (PubMed:<a

href="http://www.uniprot.org/citations/21807393" target="_blank">21807393).

Cellular Location
[Glycoprotein N]: Virion membrane {ECO:0000250|UniProtKB:P08668}; Multi-pass membrane protein. Host cell surface. Host Golgi apparatus membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P08668}. Host endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P08668}. Host mitochondrion {ECO:0000250|UniProtKB:P08668}. Note=Interaction between glycoprotein N and glycoprotein C is essential for proper targeting of glycoprotein N to the host Golgi complex, where virion budding occurs

Puumala Virus Glycoprotein 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 Glycoprotein Antibody - Images

Puumala Virus Glycoprotein 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 Glycoprotein 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.