

Sin Nombre Virus Glycoprotein 2 Antibody

Catalog # ASC11755

Specification

Calculated MW

Sin Nombre Virus Glycoprotein 2 Antibody - Product Information

Application

Primary Accession Q89905

Other Accession <u>NP_941974</u>, <u>38371724</u>

Reactivity

Host

Clonality
Isotype

Virus

Rabbit

Polyclonal
IgG

Application Notes Sin Nombre virus glycoprotein 2 antibody

N/A KDa

can detect 10ng Sin Nombre virus

glycoprotein 2 peptide in ELISA at 1 µg/ml.

Sin Nombre Virus Glycoprotein 2 Antibody - Additional Information

Gene ID **2654026**

Target/Specificity SNVsMgp1;

Reconstitution & Storage

Sin Nombre Glycoprotein 2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

Sin Nombre Virus Glycoprotein 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Sin Nombre Virus Glycoprotein 2 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 (Probable). 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 (By similarity). 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 (By similarity).



Cellular Location

[Glycoprotein N]: Virion membrane {ECO:0000250|UniProtKB:P08668}; Multi-pass membrane protein. Host cell surface {ECO:0000250|UniProtKB:P08668}. Host Golgi apparatus membrane {ECO:0000250|UniProtKB:P08668}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P08668}. Host endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P08668}; 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 plasma membrane complex, where virion budding occurs {ECO:0000250|UniProtKB:P08668}

Sin Nombre Virus Glycoprotein 2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Sin Nombre Virus Glycoprotein 2 Antibody - Images

Sin Nombre Virus Glycoprotein 2 Antibody - Background

Sin Nombre virus (SNV) 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) (1). Hantavirus glycoprotein precursor (GPC) is posttranslationally cleaved into two glycoproteins G1 (Gn) and G2 (Gc). While the G1 glycoprotein is is thought to be degraded by the host autophagy machinery, and this autophagic clearance is required for efficient virus repliaction (2), no such degradation was observed for the G2 glycoprotein.

Sin Nombre Virus Glycoprotein 2 Antibody - References

Spiropoulou CF, Morzunov S, Feldmann H, et al. Genome structure and variability of a virus causing hantavirus pulmonary syndrome. Virology 1994; 200:715-23. Hussein ITM, Cheng E, Ganaie SS, et al. Autophagic clearance of Sin Nombre hanatavirus glycoprotein Gn promotes virus replication in cells. J. Virol. 2012; 86:7520-9.