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Hantaan Virus Glycoprotein Antibody

Catalog # ASC11757

Product Information

Application	E
Primary Accession	P08668
Other Accession	BAA05012, 455464
Reactivity	Virus
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	126421
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Hantaan virus glycoprotein antibody can detect 10ng Hantaan virus glycoprotein peptide in ELISA at 1 □g/ml.

Additional Information

Other Names	Envelope glycoprotein, GP, M polyprotein, Glycoprotein G1, Glycoprotein G2, GP
Target/Specificity	HTNVsMgp1;
Reconstitution & Storage	Hantaan virus glycoprotein antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	Hantaan Virus Glycoprotein Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GP
Function	[Glycoprotein N]: Forms homotetramers with glycoprotein C at the surface of the virion. Attaches the virion to host cell receptors including integrin ITGAV/ITGB3 (PubMed:15657120, PubMed:16310165, PubMed:31054291). This attachment induces virion internalization predominantly through clathrin-dependent endocytosis (PubMed:11886265). May also bind to host C1QBP for virus entry into the host cell (PubMed:18834607). 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. Translocates to mitochondria, binds to host TUFM and recruits MAP1LC3B (PubMed:31091447). These interactions induce mitochondrial autophagy and therefore destruction of host MAVS leading to inhibition of type I interferon (IFN) responses (PubMed:31091447). Concomitant

	breakdown of glycoprotein N is apparently prevented by the nucleoprotein that may inhibit Gn-stimulated autophagosome-lysosome fusion (PubMed:31091447). Interacts with the viral genomic RNA (By similarity).
Cellular Location	[Glycoprotein N]: Virion membrane; Multi-pass membrane protein. Host cell surface. Host Golgi apparatus membrane; Multi-pass membrane protein. Host endoplasmic reticulum membrane; Multi-pass membrane protein. Host mitochondrion. 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 {ECO:0000250|UniProtKB:P27312}

Background

Hantaan virus (HNTV) is the prototype virus of the genus hantavirus of the family Bunyaviridae, an enveloped, negative-sense RNA virus that is the eiological agent of Korean hemorrhagic fever (1). The two glycoproteins of HNTV, G1 and G2, are encoded as a continuous open reading frame to produce a polypetide precursor which is then processed to yield two glycoproteins (2). During infection both glycoproteins are found in the Golgi complex and co-expression is considered as a prerequisite for localization to the Golgi complex (2).

References

Arikawa J, Lapenotiere HF, Iacono-Connors L, et al. Coding properties of the S and M genome segments of Sapporo rat virus: comparison to other causative agents of hemorrhagic fever with renal syndrome. Virology 1990; 176:114-25.
Pensiero MN and Hay J. The Hantaan virus M-segment glycoproteins G1 and G2 can be expressed independently. J. Virol. 1992; 66:1907-14.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.