

Anti Nucleocapsid Protein of MERS CoV [7H6]

Catalogue number: 154123

Sub-type:

Images:

Contributor

Inventor: Yee Joo Tan

Institute: A*STAR Accelerate Technologies Pte Ltd

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti Nucleocapsid Protein of MERS CoV [7H6]

Alternate name: Anti-Nucleocapsid Protein of MERS CoV [7H6]

Class: Monoclonal

Conjugate: Unconjugated

Description: Monoclonal antibody which detects the nucleocapsid viral protein of MERS coronavirus. Background and Research Application The Middle East Respiratory Syndrome coronavirus (MERS-CoV) is an enveloped, single stranded, positive-sense RNA viruses of the order Nidovirales, family Coronaviridae, genus Coronavirus and lineage C of the betacoronavirus. One of the viral proteins encoded by this virus is the structural nucleocapsid (N) protein. The N protein is a phosphoprotein and the most expressed virus protein during infection. It is approximately 413 aa and possesses the N terminal and C-terminal functional domains separated by a linker and flanked at the ends by the terminal arms by intrinsically disordered regions (IDRs). The N protein primarily protects the genome of virus by self-associating with virus RNAs and encapsulating them through the formation of ribonucleic proteins (RNPs). However, the protein is a multifunctional protein with secondary functions essential for virus replication and pathogenesis by interacting with both virus and host proteins. The N protein interacts with non-structural proteins or the replicase-transcriptase complexes (RTCs) essential for RNA synthesis to produce both genomic and subgenomic RNAs. In addition, it interacts with the other structural proteins to facilitate virus assembly and release. The N protein also serves as a regulatory protein interacting with host proteins. It regulates several cellular processes including innate immune responses by acting as a viral suppressor of RNA silencing to suppress host RNA-interference mediated antiviral responses. The N protein is post-translationally modified through phosphorylation and ADP-ribosylation which play a role in modulating cellular activities such as cell cycle, translational inhibitory, immunity, inflammation, cell proliferation, apoptosis, regulation of transcription, mRNA stability and cellular stress responses.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG2b kappa

Reactivity: Mouse

Selectivity:

Host: Mouse

Immunogen: R9UM87

Immunogen UNIPROT ID: R9UM87

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: Nucleocapsid Protein of MERS-CoV

Target alternate names:

Target background: Monoclonal antibody which detects the nucleocapsid viral protein of MERS coronavirus. Background and Research Application The Middle East Respiratory Syndrome coronavirus (MERS-CoV) is an enveloped, single stranded, positive-sense RNA viruses of the order Nidovirales, family Coronaviridae, genus Coronavirus and lineage C of the betacoronavirus. One of the viral proteins encoded by this virus is the structural nucleocapsid (N) protein. The N protein is a phosphoprotein and the most expressed virus protein during infection. It is approximately 413 aa and possesses the N terminal and C-terminal functional domains separated by a linker and flanked at the ends by the terminal arms by intrinsically disordered regions (IDRs). The N protein primarily protects the genome of virus by self-associating with virus RNAs and encapsulating them through the formation of ribonucleic proteins (RNPs). However, the protein is a multifunctional protein with secondary functions essential for virus replication and pathogenesis by interacting with both virus and host proteins. The N protein interacts with non-structural proteins or the replicase-transcriptase complexes (RTCs) essential for RNA synthesis to produce both genomic and subgenomic RNAs. In addition, it interacts with the other structural proteins to facilitate virus assembly and release. The N protein also serves as a regulatory protein interacting with host proteins. It regulates several cellular processes including innate immune responses by acting as a viral suppressor of RNA silencing to suppress host RNA-interference mediated antiviral responses. The N protein is post-translationally modified through phosphorylation and ADP-ribosylation which play a role in modulating cellular activities such as cell cycle, translational inhibitory, immunity, inflammation, cell proliferation, apoptosis, regulation of transcription, mRNA stability and cellular stress responses.

Molecular weight:

Ic50:

Applications

Application: ELISA ; IF ; IP ; WB

Application notes:

Handling

Format: Liquid

Concentration: 1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: -15° C to -25° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Paul et al. 2017. Antiviral Res. 144:299-310. PMID: 28633988. ; A cross-clade H5N1 influenza A virus neutralizing monoclonal antibody binds to a novel epitope within the vestigial esterase domain of hemagglutinin. ; Shen et al. 2008. J Med Virol. 80(11):1972-83. PMID: 18814259. ; Comparing the antibody responses against recombinant hemagglutinin proteins of avian influenza A (H5N1) virus expressed in insect cells and bacteria.

CancerTools.org