

Anti-ORF7a [3C9]

Catalogue number: 152647

Sub-type:

Images:

Contributor

Inventor:

Institute: A*STAR Accelerate Technologies Pte Ltd

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-ORF7a [3C9]

Alternate name:

Class: Monoclonal

Conjugate: Unconjugated

Description: Monoclonal antibody used to study the role of ORF7a within SARS coronavirus.

Background and Research Application A novel coronavirus (termed as SARS-CoV) has been identified as the etiological agent of severe acute respiratory syndrome (SARS). The SARS-CoV genome encodes the essential CoV replication and structural proteins. In addition, the genome encodes eight 8 putative accessory proteins (i.e. ORFs 3a, 3b, 6, 7a, 7b, 8a, 8b and 9b) that do not show significant homology to viral proteins of known coronaviruses, i.e. they are unique to SARS-CoV. It is known to infect humans, bats and various other mammals. ORF7a, also known as U122, consists of 122 amino acids and is localized mainly in ER-Golgi intermediate compartment, where coronaviruses are known to assemble and bud. ORF7a can also be incorporated into the virion. The over-expression of ORF7a induces apoptosis and block cell cycle progression at G0/G1 phase. This is via interfering with pro-survival proteins such as Bcl-XL, Bcl-w, Mcl-1, and A1.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1

Reactivity: Virus

Selectivity:

Host: Mouse

Immunogen:

GST-7a (16-111 amino acids)

Immunogen UNIPROT ID: J9T5H6

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: SARS CoV ORF7a (also known as U122)

Target alternate names:

Target background: Monoclonal antibody used to study the role of ORF7a within SARS coronavirus. Background and Research Application A novel coronavirus (termed as SARS-CoV) has been identified as the etiological agent of severe acute respiratory syndrome (SARS). The SARS-CoV genome encodes the essential CoV replication and structural proteins. In addition, the genome encodes eight 8 putative accessory proteins (i.e. ORFs 3a, 3b, 6, 7a, 7b, 8a, 8b and 9b) that do not show significant homology to viral proteins of known coronaviruses, i.e. they are unique to SARS-CoV. It is known to infect humans, bats and various other mammals. ORF7a, also known as U122, consists of 122 amino acids and is localized mainly in ER-Golgi intermediate compartment, where coronaviruses are known to assemble and bud. ORF7a can also be incorporated into the virion. The over-expression of ORF7a induces apoptosis and block cell cycle progression at G0/G1 phase. This is via interfering with pro-survival proteins such as Bcl-XL, Bcl-w, Mcl-1, and A1.

Molecular weight: 14 kDa

Ic50:

Applications

Application: IF ; WB

Application notes:

Handling

Format: Liquid

Concentration:

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer:

Storage conditions:

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Kumar et al. 2007. Virology. 366(2):293-303. PMID: 17532020. ; The nonstructural protein 8 (nsp8) of the SARS coronavirus interacts with its ORF6 accessory protein.

CancerTools.org