

Anti-RSV F Glycoprotein [4-15]

Catalogue number: 151854

Sub-type:

Images:

Contributor

Inventor: Ayham Alnabulsi

Institute: Vertebrate Antibodies Limited

Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-RSV F Glycoprotein [4-15]

Alternate name:

Class: Monoclonal

Conjugate: Unconjugated

Description: Human Respiratory Syncytial Virus (RSV) is a major cause of lower respiratory tract illness and is the chief cause of hospitalization for respiratory tract illness in young children. The glycoprotein F is located on the surface of viral envelope, its function is to induce fusion of viral envelope with host-cell envelope resulting in syncytium formation. The glycoprotein F (also named VP70, F0 or fusion protein) consists of two components: F1 (also named VPG48) and F2 (also named VGP26) held together by disulphide bonds. The reported molecular weight of the VGP26 component varies between 20 to 26 kDa. On the basis of the reactivity of this antibody and the antibodies: clone 4-14 (cat number: 151851) and clone 3-5-18 (cat number: 151850), the existence of two antigenic types of human RS virus was identified, Gimenez et al. (1986). This antibody reacts with the F protein from both RS virus group A and B. It does not cross-react with other RSV proteins.

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype: IgG1 kappa, faint IgG2b

Reactivity: Virus

Selectivity:

Host: Mouse

Immunogen: The immunogen was gradient purified and UV inactivated RSN2 virus (subgroup B). The

procedure used to produce this antibody is described in Gimenez et al. (1984).

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: Validation of the monoclonal antibodies by immunoblotting (see figure): purified extracellular RSV was used as the antigen in two adjacent lanes and the virus proteins resolved by gel electrophoresis. The proteins were transferred to membrane. The proteins for one lane were incubated with the MAb to be validated and the other lane incubated with either convalescent human sera (HuS), containing antibodies to all the RSV proteins, or RSV antiserum raised in mice. Human sera containing antibodies to the RSV proteins were characterised by immunoblot using purified RS virus (PMDI 3572364). The second antibodies used were: goat anti-human immunoglobulin (lane: HuS) and goat anti mouse immunoglobulin (lane: Mab). The identity and molecular weights of the RSV proteins (VP) were well documented by the time the validation was done and are indicated in the figure. The methods used provided not only the identity of the virus protein reacting with the MAb but also its molecular weight. The validation of this MABs is described in PMID 3517224. Validation of the monoclonal antibodies by indirect immunofluorescence (see figure): for the detection of surface antigen the cells were stained directly without fixation. Cells were fixed immediately before mounting on to microscope slides

Bacterial resistance:

Selectable markers:


Additional notes:

Target details

Target: Respiratory Syncytial (RS) virus Fusion glycoprotein

Target alternate names:

Target background: Human Respiratory Syncytial Virus (RSV) is a major cause of lower respiratory tract illness and is the chief cause of hospitalization for respiratory tract illness in young children. The glycoprotein F is located on the surface of viral envelope, its function is to induce fusion of viral envelope with host-cell envelope resulting in syncytium formation. The glycoprotein F (also named VP70, F0 or fusion protein) consists of two components: F1 (also named VPG48) and F2 (also named VGP26) held together by disulphide bonds. The reported molecular weight of the VGP26 component varies between 20 to 26 kDa. On the basis of the reactivity of this antibody and the antibodies: clone 4-14 (cat number: 151851) and clone 3-5-18 (cat number: 151850), the existence of two antigenic types of human RS virus was identified, Gimenez et al. (1986). This antibody reacts with the F protein from both RS virus group A and B. It does not cross-react with other RSV proteins.

Molecular weight: The protein molecular weights were determined by co-electrophoresis with standard protein markers obtained from Sigma, their locations are marked on the figure. See also: 

Ic50:

Applications

Application: ELISA ; IHC ; IF ; WB

Application notes:

Handling

Format: Liquid

Concentration: 1mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: Dulbecco's media containing 20% Fetal Bovine serum (DH20) prepared as follows (for final volume of 300ml: 237ml DMEM plus 60 ml Fetal Bovine Serum plus 3ml L-Glutamine).

Storage conditions: -15° C to -25° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Gimenez et al. 1986. Journal General Virology. 67: 863-70. PMID: 3517224