

Product Information

Recombinant Anti-RSV F Antibody scFv Fragment

Cat. No.: **MOM-18009-S(P)**

This product is for research use only and is not intended for diagnostic use.

Product Overview

Recombinant Humanized (from mouse) Antibody scFv Fragment is against RSV, expressed in E. coli

Antigen Description

Respiratory Syncytial Virus (RSV) Fusion (F) Glycoprotein is a Class I viral fusion protein. Under the current model, the protein has at least 3 conformational states: pre-fusion native state, pre-hairpin intermediate state, and post-fusion hairpin state. During viral and target cell membrane fusion, the heptad repeat (HR) regions assume a trimer-of-hairpins structure, positioning the fusion peptide in close proximity to the C-terminal region of the ectodomain. The formation of this structure appears to drive apposition and subsequent fusion of viral and target cell membranes. Directs fusion of viral and cellular membranes leading to delivery of the nucleocapsid into the cytoplasm. This fusion is pH independent and occurs directly at the outer cell membrane. The trimer of F1-F2 (protein F) interacts with glycoprotein G at the virion surface. Upon binding of G to heparan sulfate, the hydrophobic fusion peptide is unmasked and interacts with the cellular membrane, inducing the fusion between host cell and virion membranes. Notably, RSV fusion protein is able to interact directly with heparan sulfate and therefore actively participates in virus attachment. Furthermore, the F2 subunit was identified as the major determinant of RSV host cell specificity. Later in infection, proteins F expressed at the plasma membrane of infected cells mediate fusion with adjacent cells to form syncytia, a cytopathic effect that could lead to tissue necrosis. The fusion protein is also able to trigger p53-dependent apoptosis.

Specific Activity

Tested positive against native antigen.

Target

RSV

Immunogen

The details of the immunogen for this antibody are not available.

Source

Humanized (from mouse)

Species Reactivity

RSV

Type

scFv Fragment from Humanized (from mouse) IgG1 - kappa

Expression Host

E. coli

Purity

Purity >95% by SDS-PAGE.

Applications

Suitable for use in ELISA, WB, Neut and most other immunological methods.

Storage

Store at -20°C. Avoid multiple freeze/thaw cycles.

BACKGROUND**Introduction**

Humanized Anti-Human RSV Monoclonal Antibody binds to the fusion glycoprotein of RSV. This prevents its binding and uptake by host cellular receptors. This product has the same active ingredient as Palivizumab.

Keywords

RSV; F; Fusion protein (F); NP_044596.1; UniProt ID: O09720; O09720; Entrez: 1494475; Entrez Gene: 1494475; Gene ID: 1494475; Palivizumab; Synagis; Palivizumab; Synagis