抗HRSV融合蛋白参考抗体

Anti-HRSV Fusion Protein Reference Antibody

货号：RB9T37015297

在您使用本产品前请认真阅读说明书，这对您顺利完成实验很有帮助。

产品编码
RB9T37015297

中文名称
抗HRSV融合蛋白参考抗体

英文名称
Anti-HRSV Fusion Protein Reference Antibody

形态
Liquid

纯度
>95% purity as determined by SDS-PAGE.

内毒素水平
Please contact the lab for this information.

应用
ELISA, Bioactivity: FACS, Functional assay, Research in vivo

表达系统
Mammalian Cells

登录号
P03420

宿主种属
Lama/glama

克隆性
Monoclonal

抗体亚型
VH-VH-VH

纯化方式
Protein A/G purified from cell culture supernatant.

浓度
2.9mg/ml

种属反应性
HRSV-A

靶标

F, Fusion glycoprotein F0, Fusion glycoprotein F2, p27, Intervening segment, Pep27, Peptide 27, Fusion glycoprotein F1

背景信息

Gontivimab is a fully human IgG monoclonal antibody (mAb) developed using recombinant DNA technology for the prevention of respiratory syncytial virus (RSV) infections. It is designed to provide passive immunization to individuals at elevated risk of severe disease, particularly infants with prematurity or underlying medical conditions. Gontivimab is directed against a conserved neutralizing epitope within the prefusion conformation of the RSV Fusion (F) protein, a structural state critical for viral membrane fusion and host-cell entry. By targeting this highly accessible antigenic site, Gontivimab achieves potent inhibition of both RSV-A and RSV-B strains.

Gontivimab is composed entirely of human immunoglobulin gene sequences without murine elements. The heavy chain derives from human IgG1 constant domains and variable region frameworks from VH gene families commonly involved in high-affinity antiviral responses. The light chain contains the human Cκ constant domain and kappa variable region frameworks. Antigen specificity is conferred by complementarity-determining regions selected to recognize the conserved prefusion F epitope with high affinity and stability. As with other fully human antibodies, this design minimizes immunogenicity while maintaining strong neutralizing activity.

Structurally, Gontivimab consists of two heavy chains and two light chains, forming a typical IgG molecule with an approximate molecular weight of 145,000–150,000 Daltons. Preclinical studies show that Gontivimab markedly reduces viral replication, airway inflammation, and lower-respiratory tract pathology. Fc engineering has been applied to extend serum half-life, allowing prolonged protective levels throughout the RSV season with fewer injections.

Although still in clinical development, Gontivimab is intended for prophylaxis in infants and other vulnerable groups at higher risk of severe RSV disease, including those with bronchopulmonary dysplasia or chronic lung disease, and patients with hemodynamically significant congenital heart disease. These populations experience greater morbidity, hospitalization frequency, and long-term respiratory complications following RSV infection.

Through its fully human sequence, targeted epitope specificity, and extended half-life, Gontivimab represents a next-generation monoclonal antibody for RSV prevention and a valuable molecule for advancing research on viral neutralization, antibody engineering, and RSV immunopathogenesis.

别名

ALX-0171, VR-465, 1257358-38-5

储存缓冲液

0.01M PBS, pH 7.4.

稳定性和储存

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Store at 4° C for short-term storage (1-2 weeks). Store at -20° C for up to 12 months. For long-term storage, store at -80° C.

For research use only. Not suitable for clinical or therapeutic use.