

重组 SARS-CoV-2 S 蛋白 RBD (Fc Tag) 说明书

产品名称

通用名称: 重组 SARS-CoV-2 S 蛋白 RBD (Fc Tag)

英文名称: Recombinant SARS-Cov-2 Spike Protein-RBD (Fc Tag)

货号: TL-762

产品信息

同义词: 2019-nCoV RBD Protein; 2019-nCoV S1 Protein; 2019-nCoV Spike RBD Protein

表达宿主: CHO 细胞

蛋白序列: DNA 序列编码重组 SARS-CoV-2 (2019-nCoV) RBD 蛋白表达带有 Fc 标签在 C 末端。

分子量: 重组 SARS-CoV-2 (2019-nCoV) RBD 蛋白包含 470 个氨基酸, 预测的理论分子量为 52.9kd。

纯度: $\geq 95\%$ 采用 SDS-PAGE 凝胶分析和 SEC-HPLC 分析。

内毒素: ≤ 0.01 EU/ug (凝胶法)

提纯方法: 层析纯化

组成: 1. 含有 6%甘露醇和 6%海藻糖的无菌 PBS (pH7.4) 的冻干粉。
2. 0.2 μ M 无菌过滤的 PBS, pH 7.4 的液体。

提示: 本蛋白带有人 Fc 标签, 应用中会与人源抗体的二抗发生反应, 因此请特别注意。

稳定性和储存

1、冻干的样本可在 4°C 保存 24 个月, 溶解后的液体可于 -20°C 保存 6-12 个月, 并且避免反复冻融。

2、液体样本在 -20~-80°C 保存 12 个月, 融化后需要进行分装保存于 -20°C 保存 6-12 个月, 避免反复冻融。

作用机理

The spike (S) glycoprotein of coronaviruses contains protrusions that will only bind to certain receptors on the host cell. Known receptors bind S1 are ACE2, angiotensin-converting enzyme 2; DPP4, dipeptidyl peptidase-4; APN, aminopeptidase N; CEACAM, carcinoembryonic antigen-related cell adhesion molecule. The spike protein is a large type I transmembrane protein containing two subunits, S1 and S2. S1 mainly contains a receptor binding domain (RBD), which is responsible for recognizing the cell surface receptor. S2 contains basic elements needed for the membrane fusion. The S protein plays key parts in the induction of neutralizing-antibody and T-cell responses, as well as protective immunity. The main functions for the Spike protein are summarized as: Mediate receptor binding and membrane fusion; Defines the range of the hosts and specificity of the virus; Main component to bind with the neutralizing antibody; Key target for vaccine design; Can be transmitted between different hosts through gene recombination or mutation of the receptor binding domain (RBD), leading to a higher mortality rate.

参考文献

1、Jasper Fuk-Woo Chan. et al. (2020) Emerging Microbes & Infections, VOL. 9.