

Recombinant SARS-COV-2 Spike S1 NTD (His-Flag Tag)

产品信息

产品名称	产品编号	规格
Recombinant SARS-COV-2 Spike S1 NTD (His-Flag Tag)	94031ES25	25 µg
	94031ES60	100 µg
	94031ES76	500 µg
	94031ES80	1 mg

产品描述

SARS-CoV-2, which causes the global pandemic coronavirus disease 2019 (Covid-19), belongs to a family of viruses known as coronaviruses that also include MERS-CoV and SARS-CoV-1. Coronaviruses are commonly comprised of four structural proteins: Spike protein (S), Envelope protein (E), Membrane protein (M) and Nucleocapsid protein (N). The SARS-CoV-2 S protein is a glycoprotein that mediates membrane fusion and viral entry. The S protein is homotrimeric, with each ~180-kDa monomer consisting of two subunits, S1 and S2. In SARS-CoV-2, as with most coronaviruses, proteolytic cleavage of the S protein into S1 and S2 subunits is required for activation. The S1 subunit is focused on attachment of the protein to the host receptor, while the S2 subunit is involved with cell fusion. The S1 subunit can be further divided into an N-terminal domain (NTD) and a receptor binding domain (RBD). The SARS-CoV-2 NTD shares 50% and 20% amino acid (aa) sequence identity with the NTD of SARS-CoV-1 and MERS-CoV, respectively. The NTD is reported to bind L-SIGN and DC-SIGN in cells that don't express the ACE-2 receptor. Despite being heavily glycosylated, the NTD is capable of eliciting an immune response to produce potent neutralization antibodies, although at a reduced level than the ones targeting the RBD. Three immunogenic regions have been identified in the NTD: aa 14-20, aa 140-158, and aa 245-264. Antibody cocktails targeting both NTD and RBD could provide better protection against SARS-CoV-2 infection.

产品性质

别名	S1 protein NTD,Spike glycoprotein Subunit1 NTD,S glycoprotein Subunit1 NTD,Spike protein S1 NTD
Accession	QHD43416.1
表达区间及表达系统	Recombinant SARS-COV-2 Spike S1 NTD Protein is expressed from HEK293 Cells with His tag and Flag tag at the C-terminal. It contains Val16-Ser305.
分子量	Approximately 35 kDa. Due to glycosylation, the protein migrates to 55-70 kDa based on Tris-Bis PAGE result.
纯度	> 95% as determined by SDS-PAGE and HPLC.
内毒素	< 1.0 EU per 1µg of the protein by the LAL method.
制剂	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
复溶	Centrifuge tubes before opening. Reconstituting to a concentration more than 100 µg/mL is recommended (usually we use 1 mg/mL solution for lyophilization). Dissolve the lyophilized protein in distilled water.

运输与保存方法

冰袋运输。-20°C至-80°C保存，一年有效期。

复溶后，-20 至 -80°C，在未开封状态下保存 3-6 个月。复溶后，2-8°C 保存 2-7 天。

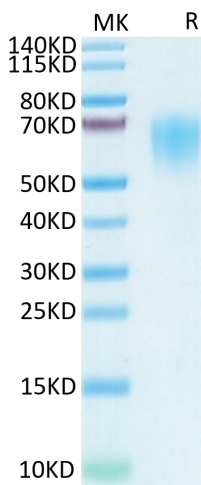
建议第一次使用时分装冻存，避免反复冻融。

注意事项

1. 避免反复冻融。
2. 为了您的安全和健康，请穿实验服并戴一次性手套操作。
3. 本产品仅作科研用途！

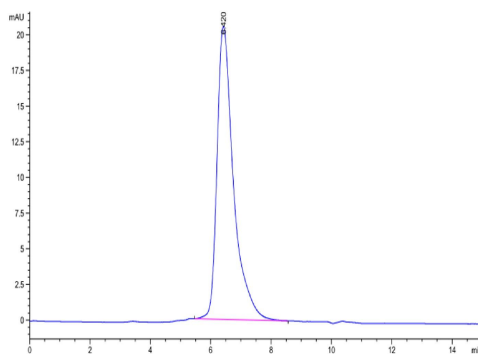
产品数据

Tris-Bis PAGE



SARS-COV-2 Spike S1 NTD on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of SARS-COV-2 Spike S1 NTD is greater than 95% as determined by SEC-HPLC.