HB220803

Recombinant Human ACE2/ACEH (His Tag)

产品信息

产品名称	产品编号	规格
Recombinant Human ACE2/ACEH (His Tag)	94026ES25	25 μg
	94026ES60	100 μg
	94026ES76	500 μg
	94026ES80	1 mg

产品描述

Angiotensin I Converting Enzyme (ACE-2), also called ACEH (ACE homologue), is a dimeric, zinc-dependent metalloprotease of the ACE family that also includes somatic and germinal ACE. ACE-2 mRNA is found at high levels in heart, testis, and kidney and at lower levels in a wide variety of tissues. ACE-2 is the SARS-CoV and SARS-CoV2 Spike protein receptor in vivo, functions catalytically as a carboxypeptidase to cleave several substrates including angiotensins I and II, and acts as a partner for B0AT1-family amino acid transporters. Through these functions, ACE-2 has been shown to be involved in several diseases including SARS, COVID19, acute lung injury, heart disease, liver and lung fibrosis, inflammatory lung disease, and cardiopulmonary disease . Full length ACE-2 protein includes an extracellular region composed of a single N-terminal peptidase domain and C-terminal collectrin-like domain (CLD), a transmembrane domain, and a short cytoplasmic tail. The N-terminal peptidase region is required for binding to SARS-CoV and SARS-CoV2 spike proteins, while the CLD contains a region that promotes dimerization and association with amino acid transporters. The peptidase domain contains a long deep cleft that undergoes a large hinge-bending movement at substrate and inhibitor binding. Classical ACE inhibitors such as captopril and lisinopril do not inhibit ACE-2 activity and inhibitors of ACE-2 do not inhibit ACE activity.

产品性质

别名	ACE-2; ACEH; ACE2
Uniprot No.	Q9BYF1.1
表达区间及表达系统	Recombinant Human ACE2/ACEH Protein is expressed from HEK293 Cells with His tag at the C-terminal. It contains Gln18-Ser740.
分子量	Approximately 84.7 kDa. Due to glycosylation, the protein migrates to 85-110 kDa based on Tris-Bis PAGE result.
纯度	> 95% as determined by SDS-PAGE and HPLC.
活性	**SPR Data**: SARS-COV-2 Spike RBD captured on Protein A chip, can bind Human ACE2, His Tag with an affinity constant of 11.9nM as determined in a SPR assay (Biacore T200).
内毒素	< 1.0 EU per 1μg of the protein by the LAL method.
制剂	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% 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℃至-80℃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。

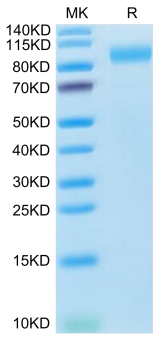
建议第一次使用时分装冻存，避免反复冻融。

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！

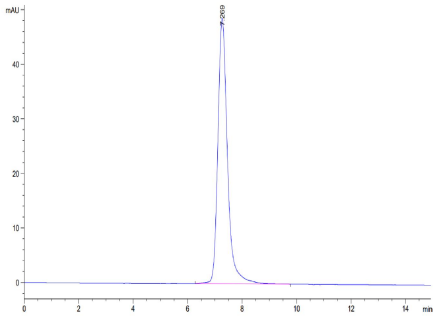
产品数据

Tris-Bis PAGE



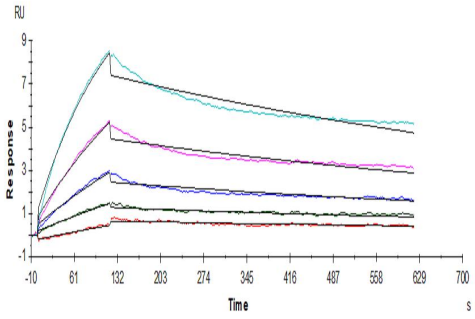
Human ACE2 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human ACE2 is greater than 95% as determined by SEC-HPLC.

SPR DATE



SARS-COV-2 Spike RBD captured on Protein A chip, can bind Human ACE2, His Tag with an affinity constant of 11.9nM as determined in a SPR assay (Biacore T200).