

Recombinant Human CD47 (His Tag)

产品信息

产品名称	产品编号	规格
Recombinant Human CD47 (His Tag)	93361ES20	20 µg
	93361ES60	100 µg
	93361ES76	500 µg
	93361ES80	1 mg

产品描述

CD47, also known as Integrin-Associated Protein (IAP) and OA3, is a 40-60 kDa variably glycosylated atypical member of the immunoglobulin superfamily. Human CD47 is an integral membrane protein that consists of a 123 amino acid (aa) extracellular domain (ECD) with a single Ig-like domain, five membrane-spanning regions with short intervening loops, and a 34 aa C-terminal cytoplasmic tail. Alternate splicing of human CD47 generates additional isoforms with deletions in the cytoplasmic tail. Within the N-terminal ECD, human CD47 shares 63% aa sequence identity with mouse and rat CD47. A portion of the N-terminal ECD can be shed from smooth muscle cells by MMP-2-mediated proteolysis. The ubiquitously expressed CD47 binds to SIRP family members on macrophages, neutrophils, and T cells. These interactions prevent macrophage-mediated clearance of healthy CD47-expressing cells and promote immune cell transmigration across the vascular endothelium. The CD47-SIRP alpha interaction is species specific, and this lack of cross-species interaction has been implicated in xenotransplantation rejection.

产品性质

别名 (Synonyms)	CD47 glycoprotein; CD47 molecule; CD47; IAP; OA3; MER6
Uniprot No.	Q08722-1
表达区间及表达系统 (Source)	Recombinant Human CD47 is expressed from HEK293 Cells with His tag at the C-terminal. It contains Gln19-Pro139.
分子量(Molecular Weight)	The protein has a predicted MW of 14.5 kDa. Due to glycosylation, the protein migrates to 45-60 kDa based on Tris-Bis PAGE result.
外观(Physical Appearance)	Sterile Filtered White lyophilized (freeze-dried) powder.
纯度 (Purity)	> 95% as determined by SDS-PAGE and HPLC
活性 (Activity)	<p>1.ELISA Data: Immobilized Human CD47, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human SIRP alpha, hFc Tag with the EC50 of 28.9ng/ml determined by ELISA.</p> <p>2.SPR Data: Human CD47, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human Sirpa, hFc Tag with an affinity constant of 18.9nM as determined in SPR assay (Biacore T200).</p>
内毒素 (Endotoxin)	< 1.0 EU per 1µg of the protein by the LAL method.
制剂 (Formulation)	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 5% trehalose is added as protectant before lyophilization.
复溶 (Reconstitution)	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。

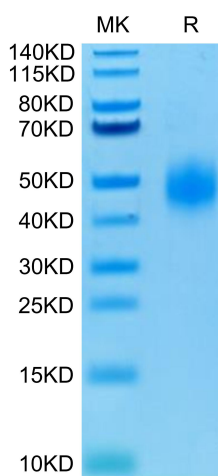
建议第一次使用时分装冻存，避免反复冻融。

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

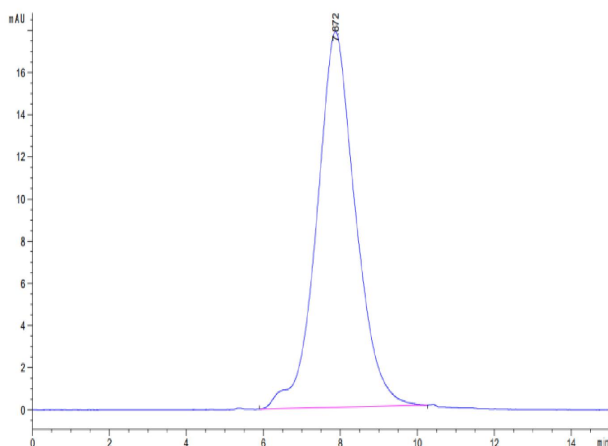
Tris-Bis PAGE



Human CD47 on Tris-Bis PAGE under reduced conditions.

The purity is greater than 95%.

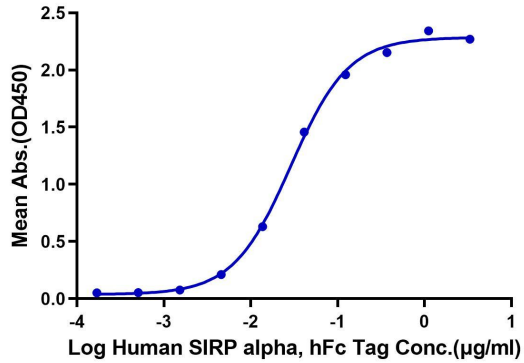
SEC-HPLC



The purity of Human CD47 is greater than 95% as determined by SEC-HPLC.

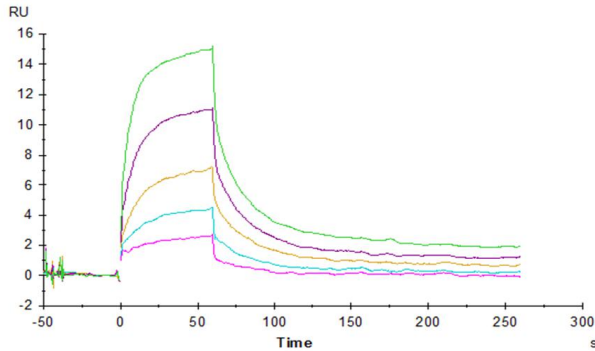
ELISA Data

Human CD47, His Tag ELISA
0.2 μ g Human CD47, His Tag Per Well



Immobilized Human CD47, His Tag at 2 μ g/ml (100 μ l/well) on the plate. Dose response curve for Human SIRP alpha, hFc Tag with the EC₅₀ of 28.9ng/ml determined by ELISA.

SPR Data



Human CD47, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human Sirpa, hFc Tag with an affinity constant of 18.9nM as determined in SPR assay (Biacore T200).