

Recombinant Human BTN3A1/CD277 (His Tag)

产品信息

产品名称	产品编号	规格
Recombinant Human BTN3A1/CD277 (His Tag)	93583ES25	25 µg
	93583ES60	100 µg
	93583ES76	500 µg
	93583ES80	1 mg

产品描述

Butyrophilin 3A1 (also called BTN3A1) is a 57 kDa type I transmembrane glycoprotein member of the Ig superfamily. It is expressed on a wide variety of immune cells. Similar to BTN3A2 and BTN3A3, BTN3A1 (484 amino acids) is composed of an extracellular N-terminal IgV and a membrane-proximal IgC domain followed by a transmembrane domain and a cytoplasmic tail. These Ig domains are also found in B7 family co-stimulatory molecules, suggesting structural and functional similarities between the two protein families. The intracellular portion of BTN3A1 contains a B30.2 domain. Although the B30.2 domain of BTN1A1 binds to xanthine oxidoreductase (XOR) and is conserved among BTN1A1 orthologs, this interaction with XOR is not shared by BTN3A1. The B30.2 domain of butyrophilins also functions as a sensor for detecting changes in intracellular phospho-antigen (pAg) concentrations produced during tumorigenesis and microbial infections. The specific binding of pAg by the B30.2 domain of BTN3A1 induces a conformational change in its ECD, leading to the activation of V gamma 9Vδ2 T cells. Thus, BTN3A1 acts as a critical protein for the activation of V gamma 9Vδ2 T cells following detection of distressed cells. The anti-tumor responses of V gamma 9Vδ2 T cells may be enhanced with agonistic anti-BTN3A1 antibodies. No BTN3A1 homolog has yet been identified in rodents.

产品性质

别名	CD277; BTN3A1; BTF5; BT3.1; BTN3.1
Uniprot No.	O00481.1
表达区间及表达系统	Recombinant Human BTN3A1/CD277 Protein is expressed from HEK293 Cells with His tag at the C-terminal. It contains Gln30-Gly254.
分子量	Approximately 25.3 kDa. Due to glycosylation, the protein migrates to 28-35 kDa based on Tris-Bis PAGE result.
纯度	> 95% as determined by SDS-PAGE and HPLC.
活性	ELISA Data: Immobilized Human BTN3A1, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-BTN3A1 Antibody, hFc Tag with the EC50 of 4.8ng/ml determined by ELISA.
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°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。

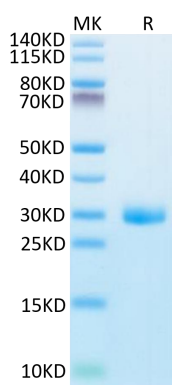
建议第一次使用时分装冻存，避免反复冻融。

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！

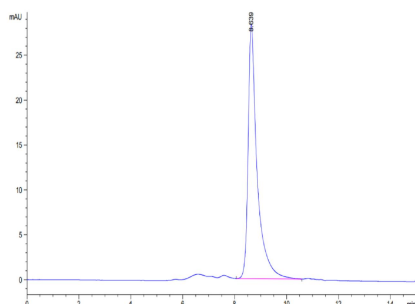
产品数据

Tris-Bis PAGE



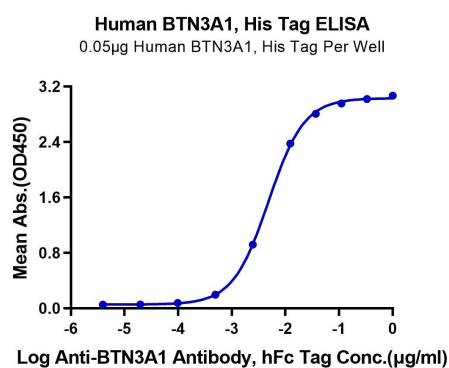
Human BTN3A1 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



The purity of Human BTN3A1 is greater than 95% as determined by SEC-HPLC.

ELISA Data



Immobilized Human BTN3A1, His Tag at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Anti-BTN3A1 Antibody, hFc Tag with the EC₅₀ of 4.8ng/ml determined by ELISA.