重组人TLR8蛋白

Recombinant TLR8 protein (His tag)

目录号 Catalog Number	548341
同用名 Synonyms	CD antigen CD288
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	Q9NR97
分子量 Molecular Weight	Predictes a molecular mass of 42.08 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

产品信息

序列区间 Sequence Region	471-827
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile PBS, pH 7.4
纯度 Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
内毒素 Endotoxin	Not tested.
活性 Activity	Not tested.
稳定性 Stability	Samples are stable for up to twelve months from date of receipt at -70℃
蛋白构建 Protein Construction	DNA encoding 471-827 aa (Q9NR97) were fused with N-terminal 6His tag.

保存与运输

复溶 Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
储存 Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
运输 Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

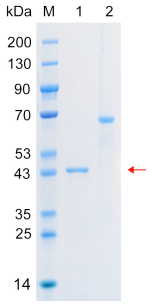
功能描述

研究背景 Background

Recombinant Human Toll-like Receptor 8 (TLR8/CD288) Fragment (aa 471-827) is a high-purity protein designed for immunological and infectious disease research. This fragment encompasses the LRRCT domain, making it an ideal tool for studying domain-specific functions in pathogen recognition and immune signaling pathways.
Toll-like receptor 8 (TLR8) is an endosomal membrane receptor crucial for innate and adaptive immunity. It recognizes microbial RNA degradation products processed by RNASET2 and specifically binds GU-rich single-stranded RNA from pathogens including SARS-CoV-2, SARS-CoV-1, and HIV-1. Upon agonist binding, TLR8 dimerizes and recruits MYD88 through TIR domain interactions, forming the Myddosome complex with IRAK4, IRAK1, TRAF6, and TRAF3. This cascade activates NF-kappa-B and IRF7 transcription factors, driving production of pro-inflammatory cytokines and interferons. The protein localizes to endosome membranes as a single-pass type I membrane protein, where its distinctive proteolytic p

验证数据

SDS-PAGE



Recombinant TLR8 protein (His tag) SDS-PAGE
M: Marker; Lane 1: TLR8; Lane 2: BSA