重组人TLR9蛋白

Recombinant TLR9 protein (His tag)

目录号 Catalog Number	541335
同用名 Synonyms	CD antigen CD289
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	Q9NR96
分子量 Molecular Weight	Predictes a molecular mass of 47.13 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MNHKVLGTLP AFLPCELQPH GLVNCNWLFL KSVPHFSMAA PRGNVTSLSL SSNRIHHLHD SDFAHLPSLR HLNLKWNCPP VGLSPMHFPC HMTIEPSTFL AVPTLEELNL SYNNIMTVPA LPKSLISLSL SHTNILMLDS ASLAGLHALR FLFMDGNCYY KNPCRQALEV APGALLGLGN LTHLSLKYNN LTVVPRNLPS SLEYLLLSYN RIVKLAPEDL ANLTALRVLD VGGNCRRCDH APNPCMECPR HFPQLHPDTF SHLSRLEGLV LKDSSLSWLN ASWFRGLGNL RVLDLSENFL YKCITKTKAF QGLTQLRKLN LSFNYQKRVS FAHLSLAPSF GSLVALKELD MHGIFFRSLD ETTLRPLARL PMLQTLRLQM NFINQAQLGI FRAFPGLRYV DLSDNRISGA SLEHHHHHH
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 26-431 aa (Q9NR96) were fused with C-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.

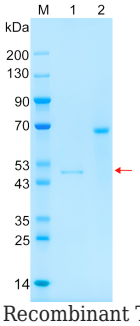
功能描述

研究背景 Background

This recombinant protein represents a stable and soluble fragment (residues 26-431) of human Toll-like receptor 9 (TLR9/CD289), a key pattern recognition receptor in innate and adaptive immunity. This 406-amino acid fragment has been computationally optimized for structural and biochemical studies, providing researchers with a valuable tool for investigating nucleotide-sensing immune pathways.
Toll-like receptor 9 is a crucial component of both innate and adaptive immunity, functioning as a nucleotide-sensing receptor that recognizes unmethylated cytidine-phosphate-guanosine (CpG) dinucleotides. Upon activation, TLR9 initiates immune responses through MYD88 and TRAF6 signaling pathways, leading to NF-kappa-B activation, cytokine secretion, and inflammatory responses. The receptor plays a vital role in B-cell proliferation, activation, survival, and antibody production following CpG stimulation. TLR9 exhibits dynamic subcellular localization, primarily residing in the endoplasmic reticulum membrane as a single-pass type I membrane protein, and relocalizing to endosomes, lysosomes, phagosomes, and Golgi apparatus upon agonist stimulation. This intracellular trafficking, regulated by UNC93B1, is essential for proteolytic cleavage and receptor activation, while also serving to prevent inappropriate responses to self nucleic acids.

验证数据

SDS-PAGE



Recombinant TLR9 protein (His tag) SDS-PAGE
M: Marker; Lane 1: TLR9; Lane 2: BSA