重组人EXO1蛋白

Recombinant EXO1 protein (His tag)

目录号 Catalog Number	541565
同用名 Synonyms	hExo1; Exonuclease I; hExoI
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	Q9UQ84
分子量 Molecular Weight	Predictes a molecular mass of 43.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MGIQGLLQFI KEASEPIHVR KYKGQVVAVD TYCWLHKGAI ACAEKLAKGE PTDRYVGFCM KFVNMLLSHG IKPILVFDGC TLPSKKEVER SRRERRQANL LKGKQLLREG KVSEARECFT RSINITHAMA HKVIKAARSQ GVDCLVAPYE ADAQLAYLNK AGIVQAIITE DSDLLAFGCK KVILKMDQFG NGLEIDQARL GMCRQLGDVF TEEKFRYMCI LSGCDYLSSL RGIGLAKACK VLRLANNPDI VKVIKKIGHY LKMNITVPED YINGFIRANN TFLYQLVFDP IKRKLIPLNA YEDDVDPETL SYAGQYVDDS IALQIALGNK DINTFEQIDD YNPDTAMPAH SRSHSWDDKT CQKSANVSSI WHRNYSPLEH HHHHH
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile 25 mM HEPES, pH 8.0
纯度 Purity	>90%, 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 1-377 aa (Q9UQ84) 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.

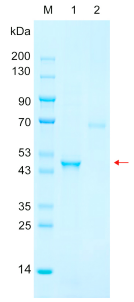
功能描述

研究背景 Background

Recombinant Human Exonuclease 1 (hExo1) fragment (amino acids 1-377) - a highly purified, stable protein unit ideal for DNA repair mechanism studies, structural analysis, and enzymatic characterization. This carefully selected fragment maintains key functional properties while offering superior solubility for experimental applications.
Human Exonuclease 1 (EXO1) is a crucial 5'→3' double-stranded DNA exonuclease that plays essential roles in DNA mismatch repair (MMR), where it excises mismatch-containing DNA tracts directed by strand breaks. The enzyme also exhibits endonuclease activity against 5'-overhanging flap structures and is required for somatic hypermutation and class switch recombination of immunoglobulin genes. EXO1 is nuclear-localized, colocalizing with PCNA to discrete nuclear foci during S-phase, and is indispensable for both male and female meiosis. The full-length protein's multifaceted functions in DNA repair and recombination make it a critical target for understanding genomic stab

验证数据

SDS-PAGE



Recombinant EXO1 protein (His tag) SDS-PAGE
M: Marker; Lane 1: EXO1; Lane 2: BSA