重组人RCC1蛋白

Recombinant RCC1 protein (His tag)

目录号 Catalog Number	544449
同用名 Synonyms	Cell cycle regulatory protein; Chromosome condensation protein 1
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	P18754
分子量 Molecular Weight	Predictes a molecular mass of 46.50 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MSKIKSPKRI AKRRSPPADA IPKSKKVKVS HRSHSTEPGL VLTLGQGDVG QLGLGENVME RKKPALVSIP EDVVQAEAGG MHTVCLSKSG QVYSFGCNDE GALGRDTSVE GSEMVPGKVE LQEKVVQVSA GDSHTAALTD DGRVFLWGSF RDNNGVIGLL EPMKKSMVPV QVQLDVPVVK VASGNDHLVM LTADGDLYTL GCGEQGQLGR VPELFANRGG RQGLERLLVP KCVMLKSRGS RGHVRFQDAF CGAYFTFAIS HEGHVYGFGL SNYHQLGTPG TESCFIPQNL TSFKNSTKSW VGFSGGQHHT VCMDSEGKAY SLGRAEYGRL GLGEGAEEKS IPTLISRLPA VSSVACGASV GYAVTKDGRV FAWGMGTNYQ LGTGQDEDAW SPVEMMGKQL ENRVVLSVSS GGQHTVLLVK DKEQSLEHHH HHH
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile PBS, pH 7.4
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 2-421 aa (P18754) 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.

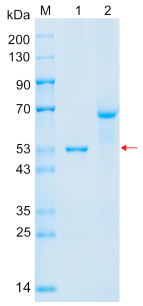
功能描述

研究背景 Background

Recombinant Regulator of Chromosome Condensation (RCC1) Fragment (aa 2-421) from Homo sapiens, a stable and soluble protein unit ideal for studying RAN-mediated nuclear import, mitotic spindle assembly, and chromosome condensation dynamics.
RCC1 is a critical guanine-nucleotide exchange factor that promotes the exchange of Ran-bound GDP for GTP, playing a pivotal role in RAN-mediated nuclear import and mitotic processes. It contributes to generating high levels of chromosome-associated GTP-bound RAN, essential for mitotic spindle assembly and proper progression through mitosis. Additionally, RCC1 maintains nuclear Ran-GTP levels to facilitate cargo release from importins after nuclear import and regulates the onset of chromosome condensation during the S phase. The protein binds to nucleosomes and double-stranded DNA and is predominantly localized in the nucleus during interphase, with association to mitotic chromosomes and presence in the cytoplasm, underscoring its multifaceted role in cell cycle r

验证数据

SDS-PAGE



Recombinant RCC1 protein (His tag) SDS-PAGE
M: Marker; Lane 1: RCC1; Lane 2: BSA