Datasheet for ABIN3135430

RAD21 Protein (AA 1-635) (His tag)

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1 Image

Overview

Quantity:	1 mg
Target:	RAD21
Protein Characteristics:	AA 1-635
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAD21 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence:	MFYAHFVLSK RGPLAKIWLA AHWDKKLTKA HVFECNLESS VESIISPKVK MALRTSGHLL LGVVRIYHRK AKYLLADCNE AFIKIKMAFR PGVVDLPEEN REAAYNAITL PEEFHDFDQP LPDLDDIDVA QQFSLNQSRV EEITMREEVG NISILQENDF GDFGMDDREI MREGSAFEDD DMLVSTSASN LLLEPEQSTS NLNEKMNHLE YEDQYKDDNF GEGNDGGILD DKLISNNDGG IFDDPPALSE AGVMLPEQPA HDDMDEDDNG SLGGPDSPDS VDPVEPMPTM TDQTTLVPNE EEAFALEPID ITVKETKAKR KRKLIVDSVK ELDSKTIRAQ LSDYSDIVTT LDLAPPTKKL MMWKETGGVE KLFFLPAQPL WNNRLLKLFT RCLTPLVPED LRKRRKGGEA DNLDEFLKEF ENPEVPREEQ QPQQQQPQPQ RDVIDEPIIE EPSRLQDSVM EASRTTIEES AMPPPPPQGV KRKAGQIDPE PSIPPQQVEQ MEIPPVELPP EEPPNICQLI PELELLPEKE KEKEKEKEEE EEEEDEDASG GDQDQEERRW NKRTQQMLHG LQRALAKTGA ESISLLELCR NTNRKQAAAK FYSFLVLKKQ QAIELTQEEP YSDIIATPGP RFHII **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a**

	special request, please contact us.
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Mouse Rad21 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	RAD21
Alternative Name:	Rad21 (RAD21 Products)
Background:	Cleavable component of the cohesin complex, involved in chromosome cohesion during cell cycle, in DNA repair, and in apoptosis. Plays a role in apoptosis, via its cleavage by caspase-3/CASP3 or caspase-7/CASP7 during early steps of apoptosis: the C-terminal 64 kDa cleavage product may act as a nuclear signal to initiate cytoplasmic events involved in the apoptotic pathway (By similarity). The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At metaphase-anaphase transition, this protein is cleaved by separase/ESPL1 and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. {ECO:0000250}.
Molecular Weight:	73.0 kDa Including tag.
UniProt:	Q61550
Pathways:	Positive Regulation of Endopeptidase Activity

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

Images

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process