

Datasheet for ABIN7563519
RAD54L Protein (AA 1-747) (His tag)



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Overview

Quantity:	1 mg
Target:	RAD54L
Protein Characteristics:	AA 1-747
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAD54L protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat Rad54l Protein expressed in mammalian cells.
Sequence:	<p>MRRSLAPSQL ARRKPEDRSS DDEDWQPGTV TPKKRKSSSE TQVQECFLSP FRKPLTQLLN RPPCLDSSQH EAFIRSILSK PFKVPIPNYQ GPLGSRALGL KRAGVRRALH DPLEEGALVL YEPPPLSAHD QLKLDKEKLP VHVVDPILS KVLRRPHQREG VKFLWECVTS RRIPGSHGCI MADEMGLGKT LQCITLMWTL LRQSPECKPE IEKAVVSPS SLVKNWYNEV EKWLGGRIOQP LAIDGGSKDE IDRKLEGFMN QRGARVPSP I LIISYETFRL HVGVLKKNV GLVICDEGHR LKNSENQTYQ ALDSLNTSRR VLISGTPIQN DLLEYFSLVH FVNSGILGTA HEFKKHFFELP ILKSRDAAAS EADRQRGEER LRELIGIVNR CLIRRTSDIL SKYLPVKIEQ VCCRRLTPLQ TELYKRFLRQ AKPEEELREG KMSVSSLSSI TSLKKLCNHP ALIYDKCVAE EDGFEGTLGI FPPGYNSKAV EPQLSGKMLV LDYILAVTRS RSSDKVVLVS NYTQTLDLFE KLCRRVRYLY VRLDGTMSIK KRAKVVERFN SPSSPDFVFM LSSKAGGCGL NLIGANRLVM FDPDWNPNAND EQAMARVWRD GQKKICYIYR LLSAGTIEEK IFQRQSHKKA LSSCVVDEEQ DVERHFSLGE</p>

Product Details

LKELFTLDEA SLSDTHDRLH CRRCVNNRQV WPPPDGSDCT SDLAQWNHST DKRGLQDEVL
QAAWDASSTA ITFVFHQRSR EEQRGLH **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Characteristics:

Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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 try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

RAD54L

Alternative Name:

Rad54I ([RAD54L Products](#))

Background:

DNA repair and recombination protein RAD54-like (EC 3.6.4.12) (RAD54 homolog) (mHR54) (mRAD54),FUNCTION: Plays an essential role in homologous recombination (HR) which is a major pathway for repairing DNA double-strand breaks (DSBs), single-stranded DNA (ssDNA) gaps, and stalled or collapsed replication forks. Acts as a molecular motor during the homology search and guides RAD51 ssDNA along a donor dsDNA thereby changing the homology search from the diffusion-based mechanism to a motor-guided mechanism. Plays also an essential role in RAD51-mediated synaptic complex formation which consists of three strands encased in a protein filament formed once homology is recognized. Once DNA strand exchange occurred, dissociates RAD51 from nucleoprotein filaments formed on dsDNA (By similarity). Deficiency

Target Details

also resulted in an increased frequency of end-to-end chromosome fusions involving telomeres compared to the controls, suggesting a putative role in telomere capping. Non-homologous end joining (NHEJ) and homologous recombination (HR) represent the two major pathways of DNA double-strand break (DSB) repair in eukaryotic cells. LIG4 and RAD54L cooperate to support cellular proliferation, repair spontaneous DSBs, and prevent chromosome and single chromatid aberrations (PubMed:10209103, PubMed:10757799, PubMed:12218123, PubMed:12531026, PubMed:12548566, PubMed:12897131, PubMed:15175260, PubMed:9108475).

{ECO:0000250|UniProtKB:P32863, ECO:0000269|PubMed:10209103, ECO:0000269|PubMed:10757799, ECO:0000269|PubMed:12218123, ECO:0000269|PubMed:12531026, ECO:0000269|PubMed:12548566, ECO:0000269|PubMed:12897131, ECO:0000269|PubMed:15175260, ECO:0000269|PubMed:9108475}.

Molecular Weight: 84.7 kDa

UniProt: [P70270](#)

Pathways: [DNA Damage Repair](#)

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 guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months