Datasheet for ABIN7551136

RAD51AP1 Protein (AA 1-352) (His tag)

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Overview

Quantity:	1 mg
Target:	RAD51AP1
Protein Characteristics:	AA 1-352
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAD51AP1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat RAD51AP1 Protein expressed in mammalien cells.
Sequence:	MVRPVRHKKP VNYSQFDHSD SDDDFVSATV PLNKKSRTAP KELKQDKPKP NLNNLRKEEI PVQEKTPKKR LPEGTFSIPA SAVPCTKMAL DDKLYQRDLE VALALSVKEL PTVTTNVQNS QDKSIEKHGS SKIETMNKSP HISNCSVASD YLDLDKITVE DDVGGVQGKR KAASKAAAQQ RKILLEGSDG DSANDTEPDF APGEDSEDDS DFCESEDNDE DFSMRKSKVK EIKKKEVKVK SPVEKKEKKS KSKCNALVTS VDSAPAAVKS ESQSLPKKVS LSSDTTRKPL EIRSPSAESK KPKWVPPAAS GGSRSSSSPL VVVSVKSPNQ SLRLGLSRLA RVKPLHPNAT ST **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:

Product Details

	• Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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:	RAD51AP1
Alternative Name:	RAD51AP1 (RAD51AP1 Products)
Background:	RAD51-associated protein 1 (HsRAD51AP1) (RAD51-interacting protein),FUNCTION: Structure-specific DNA-binding protein involved in DNA repair by promoting RAD51-mediated homologous recombination (PubMed:17996710, PubMed:17996711, PubMed:20871616, PubMed:25288561, PubMed:26323318). Acts by stimulating D-Loop formation by RAD51: specifically enhances joint molecule formation through its structure-specific DNA interaction and its interaction with RAD51 (PubMed:17996710, PubMed:17996711). Binds single-stranded DNA (ssDNA), double-stranded DNA (dsDNA) and secondary DNA structures, such as D-loop structures: has a strong preference for branched-DNA structures that are obligatory intermediates during joint molecule formation (PubMed:9396801, PubMed:17996711, PubMed:22375013, PubMed:17996710). Cooperates with WDR48/UAF1 to stimulate RAD51-mediated homologous recombination: both WDR48/UAF1 and RAD51AP1 have coordinated role in DNA-binding during homologous recombination and DNA repair (PubMed:27463890, PubMed:27239033, PubMed:32350107). WDR48/UAF1 and RAD51AP1 also have a coordinated role in DNA-binding to promote USP1-mediated deubiquitination of FANCD2

Target Details

	(PubMed:31253762). Also involved in meiosis by promoting DMC1-mediated homologous meiotic recombination (PubMed:21307306). Key mediator of alternative lengthening of telomeres (ALT) pathway, a homology-directed repair mechanism of telomere elongation that controls proliferation in aggressive cancers, by stimulating homologous recombination (PubMed:31400850). May also bind RNA, additional evidences are however required to confirm RNA-binding in vivo (PubMed:9396801). {ECO:0000269|PubMed:17996710, ECO:0000269|PubMed:17996711, ECO:0000269|PubMed:20871616, ECO:0000269|PubMed:21307306, ECO:0000269|PubMed:22375013, ECO:0000269|PubMed:25288561, ECO:0000269|PubMed:26323318, ECO:0000269|PubMed:27239033, ECO:0000269|PubMed:27463890, ECO:0000269|PubMed:31253762, ECO:0000269|PubMed:31400850, ECO:0000269|PubMed:32350107, ECO:0000269|PubMed:9396801}.
Molecular Weight:	38.5 kDa
UniProt:	Q96B01

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