Datasheet for ABIN7555114

RAD1 Protein (AA 1-282) (His tag)

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Overview

Quantity:	1 mg
Target:	RAD1
Protein Characteristics:	AA 1-282
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAD1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat RAD1 Protein expressed in mammalien cells.
Sequence:	MPLLTQQIQD EDDQYSLVAS LDNVRNLSTI LKAIHFREHA TCFATKNGIK VTVENAKCVQ ANAFIQAGIF QEFKVQEESV TFRINLTVLL DCLSIFGSSP MPGTLTALRM CYQGYGYPLM LFLEEGGVVT VCKINTQEPE ETLDFDFCST NVINKIILQS EGLREAFSEL DMTSEVLQIT MSPDKPYFRL STFGNAGSSH LDYPKDSDLM EAFHCNQTQV NRYKISLLKP STKALVLSCK VSIRTDNRGF LSLQYMIRNE DGQICFVEYY CCPDEEVPES ES **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.

Product Details

	• 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:	RAD1
Alternative Name:	RAD1 (RAD1 Products)
Background:	Cell cycle checkpoint protein RAD1 (hRAD1) (Rad1-like DNA damage checkpoint protein),FUNCTION: Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair (PubMed:10846170, PubMed:10884395). The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex (PubMed:12578958). Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER) (PubMed:15871698). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds, endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths, and DNA ligase I (LIG1) on long-patch base excision repair substrates (PubMed:15314187, PubMed:15556996, PubMed:15871698). The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase (PubMed:21659603). {ECO:0000269|PubMed:10846170, ECO:0000269|PubMed:10884395, ECO:0000269|PubMed:12578958, ECO:0000269|PubMed:15314187, ECO:0000269|PubMed:15556996,

Target Details

	ECO:0000269|PubMed:15871698, ECO:0000269|PubMed:21659603}.
Molecular Weight:	31.8 kDa
UniProt:	O60671
Pathways:	M Phase

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

