Datasheet for ABIN7553914

FAN1 Protein (AA 1-1017) (His tag)

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Overview

Quantity:	1 mg
Target:	FAN1
Protein Characteristics:	AA 1-1017
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FAN1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant FAN1 Protein expressed in mammalian cells.
Sequence:	MMSEGKPPDK KRPRRSLSIS KNKKKASNSI ISCFNNAPPA KLACPVCSKM VPRYDLNRHL DEMCANNDFV QVDPGQVGLI NSNVSMVDLT SVTLEDVTPK KSPPPKTNLT PGQSDSAKRE VKQKISPYFK SNDVVCKNQD ELRNRSVKVI CLGSLASKLS RKYVKAKKSI DKDEEFAGSS PQSSKSTVVK SLIDNSSEIE DEDQILENSS QKENVFKCDS LKEECIPEHM VRGSKIMEAE SQKATRECEK SALTPGFSDN AIMLFSPDFT LRNTLKSTSE DSLVKQECIK EVVEKREACH CEEVKMTVAS EAKIQLSDSE AKSHSSADDA SAWSNIQEAP LQDDSCLNND IPHSIPLEQG SSCNGPGQTT GHPYYLRSFL VVLKTVLENE DDMLLFDEQE KGIVTKFYQL SATGQKLYVR LFQRKLSWIK MTKLEYEEIA LDLTPVIEEL TNAGFLQTES ELQELSEVLE LLSAPELKSL AKTFHLVNPN GQKQQLVDAF LKLAKQRSVC TWGKNKPGIG AVILKRAKAL AGQSVRICKG PRAVFSRILL LFSLTDSMED EDAACGGQGQ LSTVLLVNLG RMEFPSYTIN RKTHIFQDRD DLIRYAAATH MLSDISSAMA NGNWEEAKEL AQCAKRDWNR LKNHPSLRCH EDLPLFLRCF TVGWIYTRIL SRFVEILQRL HMYEEAVREL ESLLSQRIYC PDSRGRWWDR LALNLHQHLK

Product Details

	RLEPTIKCIT EGLADPEVRT GHRLSLYQRA VRLRESPSCK KFKHLFQQLP EMAVQDVKHV TITGRLCPQR GMCKSVFVME AGEAADPTTV LCSVEELALA HYRRSGFDQG IHGEGSTFST LYGLLLWDII FMDGIPDVFR NACQAFPLDL CTDSFFTSRR PALEARLQLI HDAPEESLRA WVAATWHEQE GRVASLVSWD RFTSLQQAQD LVSCLGGPVL SGVCRHLAAD FRHCRGGLPD LVVWNSQSRH FKLVEVKGPN DRLSHKQMIW LAELQKLGAE VEVCHVVAVG AKSQSLS **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	FAN1
Alternative Name:	FAN1 (FAN1 Products)
Background:	Fanconi-associated nuclease 1 (EC 3.1.21.-) (EC 3.1.4.1) (FANCD2/FANCI-associated nuclease 1) (hFAN1) (Myotubularin-related protein 15),FUNCTION: Nuclease required for the repair of DNA interstrand cross-links (ICL) recruited at sites of DNA damage by monoubiquitinated

Target Details

	FANCD2. Specifically involved in repair of ICL-induced DNA breaks by being required for efficient homologous recombination, probably in the resolution of homologous recombination intermediates (PubMed:20603015, PubMed:20603016, PubMed:20603073, PubMed:20671156, PubMed:24981866, PubMed:25430771). Not involved in DNA double-strand breaks resection (PubMed:20603015, PubMed:20603016). Acts as a 5'-3' exonuclease that anchors at a cut end of DNA and cleaves DNA successively at every third nucleotide, allowing to excise an ICL from one strand through flanking incisions. Probably keeps excising with 3'-flap annealing until it reaches and unhooks the ICL (PubMed:25430771). Acts at sites that have a 5'-terminal phosphate anchor at a nick or a 1- or 2-nucleotide flap and is augmented by a 3' flap (PubMed:25430771). Also has endonuclease activity toward 5'-flaps (PubMed:20603015, PubMed:20603016, PubMed:24981866). {ECO:0000269|PubMed:20603015, ECO:0000269|PubMed:20603016, ECO:0000269|PubMed:20603073, ECO:0000269|PubMed:20671156, ECO:0000269|PubMed:24981866, ECO:0000269|PubMed:25135477, ECO:0000269|PubMed:25430771}.
Molecular Weight:	114.2 kDa
UniProt:	Q9Y2M0
Pathways:	DNA Damage Repair

Application Details

Application Notes:	We expect the protein to work for functional studies. 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