

Datasheet for ABIN3136034
FANCD2 Protein (AA 1-1450) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	FANCD2
Protein Characteristics:	AA 1-1450
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FANCD2 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), Crystallization (Crys), ELISA

Product Details

Sequence:	<p>MISKRRRLDS EDKENLTEDA SKTMPLSKLA KKSHNSHEVE ENGSVFKLL KASGLTLKTG ENQNQLGVDQ VIFQRKLFQA LRKHPAYPKV IEEFVNGLES YTEDESRLN CLLSCERLQD EEASMGTFYS KSLIKLLGI DILQPAIKM LFEKVPQFLF ESENRDGINM ARLIINQLKW LDRIVDGKDL TAQMMQLISV APVNLQHDFI TSLPEILGDS QHANVGKELG ELLVQNTSLT VPILDVFSSL RLDPNFLSKI RQLVMGKLSS VRLEDFPVIV KFLHHSVTDT TSLEVIAELR ENLNVQQFIL PSRIQASQSK LKSKGLASSS GNQENSDKDC IVLVFDVIKS AIRYEKTISE AWFKAIERIE SAAEHKALDV VMLLIYSTS TQTKKGVEKL LRNKIQSDCI QEQLLDSAFS THYLVLKDIC PSILLAQTL FHSQDQRIIL FGSLLYKYAF KFFDTYCQQE VVGALVTHVC SGTEAEVDTA LDVLELIVL NASAMRLNAA FVKGILDYLE NMSPQIRKI FCILSTLAFS QQPGTSNHIQ DDMHLVIRKQ LSSTVFKYKL IGIIGAVTMA GIMAEDRSVP SNSSQRSANV SSEQRTQVTS LLQLVHSCTE HSPWASSLYY DEFANLIQER KLAPKTLEWV GQTIFNDFQD AFVVDFAAP EGDFFFPVKA LYGLEEYSTQ DGIVINLLPL FYQECAKDas RATSQESSQR</p>
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SMSSLCLASH FRLRLCVAR QHDGNLDEID GLLDCPLFLP DLEPGEKLES MSAKDRSLMC
SLTFLTFNWF REVVNAFCQQ TSPKMGKVL SRLKDLVELQ GILEKYLAVI PDYVPPFASV
DLDTLDMMPR SSSAVAAKNR NKGKTGGKKQ KADSNKASCS DTLLTDTSE CDMAPSGRSH
VDKESTGKEG KTFVSLQNYR AFFRELDIEV FSILHSGLVT KFILDTEMHT EATEVVQLGP
AELLFLEDL SQKLENMLTA PFAKRICCFK NKGRQNIQFS HLHQRSVQDI VHCVVQLLTP
MCNHLENIHN FFQCLGAEHL SADDKARATA QEQHTMACCY QKLLQVLHAL FAWKGFTHQS
KHRLLSALE VLSNRLQME QDQPLEELVS QSFSYLQNFH HVSVPFQCGL YLLRLLMALL
EKSAVNPQKK EKSLAKQL LCRAWPHGEK EKNPTFNDHL HDVLYIYLEH TDNLKAIEE
ITGVGVPELV SAPKDAASST FPTLTRHTFV IFFRVMAEL EKTVKGLQAG TAADSQQVHE
EKLLYWNMAV RDFSILLNLM KVFDSPVLH VCLKYGRRFV EAFLKQCMLP LDFSFRKHRE
DVLSSLQTLQ LNTRLLHHC GHSKIRQDTR LTKHVPLLKK SLELLVCRVK AMLVLNNCRE
AFWLGTLKNR DLQGEIISQ DPSSSESNAE DSEDGVTSHV SRNRATEDGE DEASDEQKDQ
DSEDESDDSSS

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 Fancd2 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 receipt 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

Product Details

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: <ol style="list-style-type: none">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:	FANCD2
Alternative Name:	Fancd2 (FANCD2 Products)
Background:	Required for maintenance of chromosomal stability. Promotes accurate and efficient pairing of homologs during meiosis. Involved in the repair of DNA double-strand breaks, both by homologous recombination and single-strand annealing. May participate in S phase and G2 phase checkpoint activation upon DNA damage. Plays a role in preventing breakage and loss of missegregating chromatin at the end of cell division, particularly after replication stress (By similarity). Promotes BRCA2/FANCD1 loading onto damaged chromatin. May also be involved in B-cell immunoglobulin isotype switching. {ECO:0000250, ECO:0000269 PubMed:12893777}.
Molecular Weight:	164.6 kDa Including tag.
UniProt:	Q80V62
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.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the

Application Details

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

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