Datasheet for ABIN3136034

FANCD2 Protein (AA 1-1450) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	FANCD2
Protein Characteristics:	AA 1-1450
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FANCD2 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	MISKRRRLDS EDKENLTEDA SKTMPLSKLA KKSHNSHEVE ENGSVFVKLL KASGLTLKTG ENQNQLGVDQ VIFQRKLFQA LRKHPAYPKV IEEFVNGLES YTEDSESLRN CLLSCERLQD EEASMGTFYS KSLIKLLLGI DILQPAIIKM LFEKVPQFLF ESENRDGINM ARLIINQLKW LDRIVDGKDL TAQMMQLISV APVNLQHDFI TSLPEILGDS QHANVGKELG ELLVQNTSLT VPILDVFSSL RLDPNFLSKI RQLVMGKLSS VRLEDFPVIV KFLLHSVTDT TSLEVIAELR ENLNVQQFIL PSRIQASQSK LKSKGLASSS GNQENSDKDC IVLVFDVIKS AIRYEKTISE AWFKAIERIE SAAEHKALDV VMLLIIYSTS TQTKKGVEKL LRNKIQSDCI QEQLLDSAFS THYLVLKDIC PSILLLAQTL FHSQDQRIIL FGSLLYKYAF KFFDTYCQQE VVGALVTHVC SGTEAEVDTA LDVLLELIVL NASAMRLNAA FVKGILDYLE NMSPQQIRKI FCILSTLAFS QQPGTSNHIQ DDMHLVIRKQ LSSTVFKYKL IGIIGAVTMA GIMAEDRSVP SNSSQRSANV SSEQRTQVTS LLQLVHSCTE HSPWASSLYY DEFANLIQER KLAPKTLEWV GQTIFNDFQD

AFVVDFCAAP EGDFPFPVKA LYGLEEYSTQ DGIVINLLPL FYQECAKDAS RATSQESSQR SMSSLCLASH FRLLRLCVAR QHDGNLDEID GLLDCPLFLP DLEPGEKLES MSAKDRSLMC SLTFLTFNWF REVVNAFCQQ TSPEMKGKVL SRLKDLVELQ GILEKYLAVI PDYVPPFASV DLDTLDMMPR SSSAVAAKNR NKGKTGGKKQ KADSNKASCS DTLLTEDTSE CDMAPSGRSH VDKESTGKEG KTFVSLQNYR AFFRELDIEV FSILHSGLVT KFILDTEMHT EATEVVQLGP AELLFLLEDL SQKLENMLTA PFAKRICCFK NKGRQNIGFS HLHQRSVQDI VHCVVQLLTP MCNHLENIHN FFQCLGAEHL SADDKARATA QEQHTMACCY QKLLQVLHAL FAWKGFTHQS KHRLLHSALE VLSNRLKQME QDQPLEELVS QSFSYLQNFH HSVPSFQCGL YLLRLLMALL EKSAVPNQKK EKLASLAKQL LCRAWPHGEK EKNPTFNDHL HDVLYIYLEH TDNVLKAIEE ITGVGVPELV SAPKDAASST FPTLTRHTFV IFFRVMMAEL EKTVKGLQAG TAADSQQVHE EKLLYWNMAV RDFSILLNLM KVFDSYPVLH VCLKYGRRFV EAFLKQCMPL LDFSFRKHRE DVLSLLQTLQ LNTRLLHHLC GHSKIRQDTR LTKHVPLLKK SLELLVCRVK AMLVLNNCRE AFWLGTLKNR DLQGEEIISQ DPSSSESNAE DSEDGVTSHV SRNRATEDGE DEASDEQKDQ DSDESDDSSS

Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for

Product Details

protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	FANCD2
Alternative Name:	Fancd2 (FANCD2 Products)
Background:	Fanconi anemia group D2 protein homolog (Protein FACD2),FUNCTION: 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:	163.6 kDa
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

Application Details

	as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months