Datasheet for ABIN7555663

OBFC1 Protein (AA 1-368) (His tag)

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Overview

Quantity:	1 mg
Target:	OBFC1
Protein Characteristics:	AA 1-368
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This OBFC1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant STN1 Protein expressed in mammalian cells.
Sequence:	MQPGSSRCEE ETPSLLWGLD PVFLAFAKLY IRDILDMKES RQVPGVFLYN GHPIKQVDVL GTVIGVRERD AFYSYGVDDS TGVINCICWK KLNTESVSAA PSAARELSLT SQLKKLQETI EQKTKIEIGD TIRVRGSIRT YREEREIHAT TYYKVDDPVW NIQIARMLEL PTIYRKVYDQ PFHSSALEKE EALSNPGALD LPSLTSLLSE KAKEFLMENR VQSFYQQELE MVESLLSLAN QPVIHSASSD QVNFKKDTTS KAIHSIFKNA IQLLQEKGLV FQKDDGFDNL YYVTREDKDL HRKIHRIIQQ DCQKPNHMEK GCHFLHILAC ARLSIRPGLS EAVLQQVLEL LEDQSDIVST MEHYYTAF **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:

Product Details

	• 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:	OBFC1
Alternative Name:	STN1 (OBFC1 Products)
Background:	CST complex subunit STN1 (Oligonucleotide/oligosaccharide-binding fold-containing protein 1) (Suppressor of cdc thirteen homolog),FUNCTION: Component of the CST complex proposed to act as a specialized replication factor promoting DNA replication under conditions of replication stress or natural replication barriers such as the telomere duplex. The CST complex binds single-stranded DNA with high affinity in a sequence-independent manner, while isolated subunits bind DNA with low affinity by themselves. Initially the CST complex has been proposed to protect telomeres from DNA degradation (PubMed:19854130). However, the CST complex has been shown to be involved in several aspects of telomere replication. The CST complex inhibits telomerase and is involved in telomere length homeostasis, it is proposed to bind to newly telomerase-synthesized 3' overhangs and to terminate telomerase action implicating the association with the ACD:POT1 complex thus interfering with its telomerase stimulation activity. The CST complex is also proposed to be involved in fill-in synthesis of the telomeric C-strand probably implicating recruitment and activation of DNA polymerase alpha (PubMed:22964711, PubMed:22763445). The CST complex facilitates recovery from many

Target Details

	forms of exogenous DNA damage, seems to be involved in the re-initiation of DNA replication at repaired forks and/or dormant origins (PubMed:25483097). Required for efficicient replication of the duplex region of the telomere. Promotes efficient replication of lagging-strand telomeres (PubMed:22863775, PubMed:22964711). Promotes general replication start following replication-fork stalling implicating new origin firing (PubMed:22863775). May be in involved in C-strand fill-in during late S/G2 phase independent of its role in telomere duplex replication (PubMed:23142664). {ECO:0000269|PubMed:19648609, ECO:0000269|PubMed:19854130, ECO:0000269|PubMed:22763445, ECO:0000269|PubMed:22863775, ECO:0000269|PubMed:22964711, ECO:0000269|PubMed:23142664, ECO:0000269|PubMed:25483097, ECO:0000305|PubMed:23851344}., FUNCTION: Component of the CST complex, a complex that binds to single-stranded DNA and is required to protect telomeres from DNA degradation. The CST complex binds single-stranded DNA with high affinity in a sequence-independent manner, while isolated subunits bind DNA with low affinity by themselves. In addition to telomere protection, the CST complex has probably a more general role in DNA metabolism at non-telomeric sites. {ECO:0000269|PubMed:19648609, ECO:0000269|PubMed:19854130}.
Molecular Weight:	42.1 kDa
UniProt:	Q9H668

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