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OBFC1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP16810b

Specification

OBFC1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9H668

OBFC1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 79991

Other Names
CST complex subunit STN1, Oligonucleotide/oligosaccharide-binding fold-containing protein 1, Suppressor of cdc thirteen homolog, OBFC1, STN1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OBFC1 Antibody (C-term) Blocking Peptide - Protein Information

Name STN1 (HGNC:26200)

Synonyms OBFC1

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 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).

Cellular Location
Nucleus. Chromosome, telomere

OBFC1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

OBFC1 Antibody (C-term) Blocking Peptide - Images

OBFC1 Antibody (C-term) Blocking Peptide - Background

OBFC1 and C17ORF68 (MIM 613129) are subunits of an alphaaccessory factor (AAF) that stimulates the activity of DNApolymerase-alpha-primase (see MIM 176636), the enzyme thatinitiates DNA replication (Casteel et al., 2009 [PubMed 19119139]).OBFC1 also appears to function in a telomere-associated complexwith C17ORF68 and TEN1 (C17ORF106; MIM 613130) (Miyake et al., 2009[PubMed 19854130]).

OBFC1 Antibody (C-term) Blocking Peptide - References

Levy, D., et al. Proc. Natl. Acad. Sci. U.S.A. 107(20):9293-9298(2010)Miyake, Y., et al. Mol. Cell 36(2):193-206(2009)Wan, M., et al. J. Biol. Chem. 284(39):26725-26731(2009)Casteel, D.E., et al. J. Biol. Chem. 284(9):5807-5818(2009)Lamesch, P., et al. Genomics 89(3):307-315(2007)