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OBFC1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16810b

Specification

OBFC1 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q9H668
Other Accession	NP_079204.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42119**
Antigen Region	**277-306**

OBFC1 Antibody (C-term) - 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

Target/Specificity
This OBFC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 277-306 amino acids from the C-terminal region of human OBFC1.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
OBFC1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

OBFC1 Antibody (C-term) - Protein Information

Name STN1 (HGNC:26200)

Synonyms OBFC1

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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).

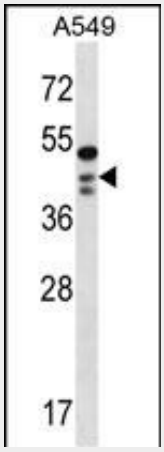
Cellular Location
Nucleus. Chromosome, telomere

OBFC1 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OBFC1 Antibody (C-term) - Images



OBFC1 Antibody (C-term) (Cat. #AP16810b) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the OBFC1 antibody detected the OBFC1 protein (arrow).

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OBFC1 Antibody (C-term) - Background

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

OBFC1 Antibody (C-term) - 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)
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