

OBFC1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16810b

Specification

OBFC1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	O9H668
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

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:[22763445](#), PubMed:[22964711](#)). 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 efficient 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 involved in C-strand fill-in during late S/G2 phase independent of its role in telomere duplex replication (PubMed:[23142664](#)).

Cellular Location

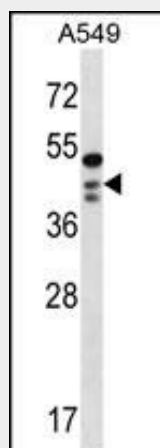
Nucleus. Chromosome, telomere

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 Cytometry](#)
- [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).

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)
Lamesch, P., et al. Genomics 89(3):307-315(2007)