

## **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

E~~Use at an assay dependent concentration.

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

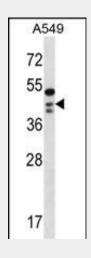
**Cellular Location**Nucleus, Chromosome, telomere

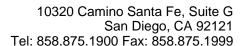
# **OBFC1 Antibody (C-term) - Protocols**

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).

## **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)