

CQ068 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4761c**Specification**

CQ068 Antibody (Center) - Product Information

Application	WB, FC,E
Primary Accession	Q2NKJ3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	134609
Antigen Region	767-795

CQ068 Antibody (Center) - Additional Information**Gene ID** 80169**Other Names**CST complex subunit CTC1, Conserved telomere maintenance component 1, HBV
DNATP1-transactivated protein B, CTC1, C17orf68**Target/Specificity**

This CQ068 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 767-795 amino acids from the Central region of human CQ068.

Dilution

WB~~1:1000

FC~~1:10~50

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

CQ068 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CQ068 Antibody (Center) - Protein Information**Name** CTC1**Synonyms** C17orf68

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](#)). 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](#)). Involved in telomere maintenance (PubMed:[19854131](#), PubMed:[22863775](#)). Involved in genome stability (PubMed:[22863775](#)). May be involved in telomeric C-strand fill-in during late S/G2 phase (By similarity).

Cellular Location

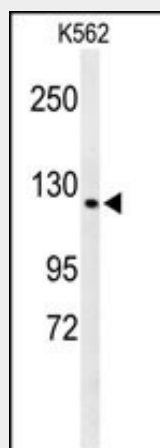
Nucleus. Chromosome, telomere. Note=A transmembrane region is predicted by sequence analysis tools (ESKW, MEMSAT and Phobius); however, given the telomeric localization of the protein, the relevance of the transmembrane region is unsure in vivo

CQ068 Antibody (Center) - Protocols

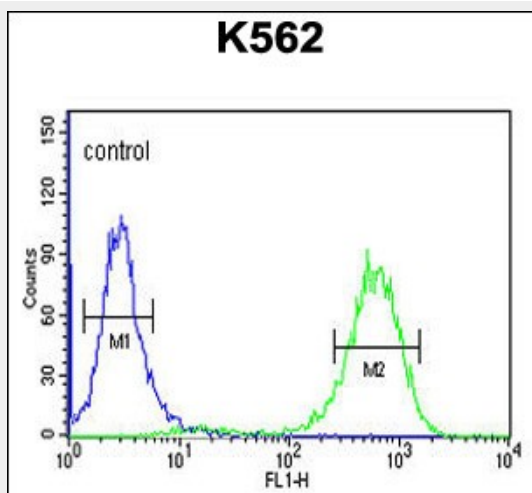
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CQ068 Antibody (Center) - Images



Western blot analysis of CQ068 Antibody (Center) (Cat. #AP4761c) in K562 cell line lysates (35ug/lane). CQ068 (arrow) was detected using the purified Pab.



CQ068 Antibody (Center) (Cat. #AP4761c) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

CQ068 Antibody (Center) - Background

CQ068 is 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. CQ068 also appears to function in a telomere-associated complex with OBFC1 and TEN1.

CQ068 Antibody (Center) - References

- Surovtseva, Y.V., et al. Mol. Cell 36(2):207-218(2009)
- Miyake, Y., et al. Mol. Cell 36(2):193-206(2009)
- Casteel, D.E., et al. J. Biol. Chem. 284(9):5807-5818(2009)