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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 DNAPTP1-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 in involved in telomeric C-strand fill-in during late S/G2 phase (By similarity).

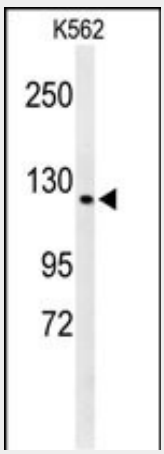
Cellular Location
Nucleus. Chromosome, telomere. Note=A transmembrane region is predicted by sequence analysis tools (ESKW, MEMSAT and Phobius); however, given the telomeric localization of the protein, the relevance of the transmembrane region is unsure in vivo

CQ068 Antibody (Center) - Protocols

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

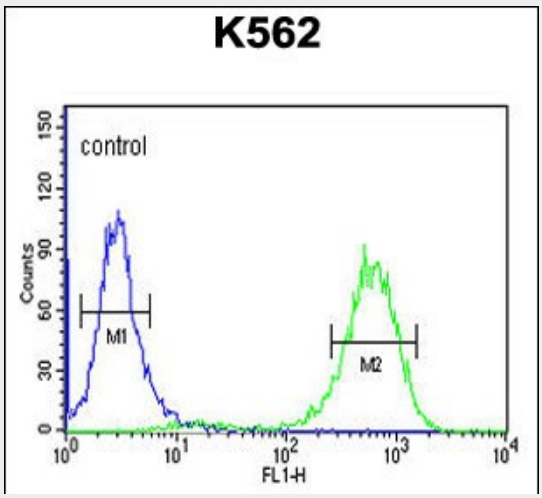
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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.

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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)