

## CTC1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55418

### Specification

# **CTC1** Polyclonal Antibody - Product Information

Application	
Primary Accession	
Reactivity	
Host	
Clonality	
Calculated MW	

IHC-P, IHC-F, IF, ICC, E <u>O2NKJ3</u> Rat Rabbit Polyclonal 134609

## **CTC1** Polyclonal Antibody - Additional Information

Gene ID 80169

Other Names CST complex subunit CTC1, Conserved telomere maintenance component 1, HBV DNAPTP1-transactivated protein B, CTC1, C17orf68

Dilution <span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# **CTC1** Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/19854130" target="\_blank">19854130</a>). 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:<a href="http://www.uniprot.org/citations/22763445" target="\_blank">22763445</a>). 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:<a href="http://www.uniprot.org/citations/25483097" target="\_blank">25483097</a>). Involved in telomere maintenance (PubMed:<a href="http://www.uniprot.org/citations/25483097" target="\_blank">22863775</a>). Involved in telomere maintenance (PubMed:<a href="http://www.uniprot.org/citations/25483097" target="\_blank">22863775</a>). Involved in telomere maintenance (PubMed:<a href="http://www.uniprot.org/citations/19854131" target="\_blank">22863775</a>). Involved in genome stability (PubMed:<a href="http://www.uniprot.org/citations/22863775" target="\_blank">22863775</a>). 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

## CTC1 Polyclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CTC1 Polyclonal Antibody - Images