

### **CTC1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55418

# **Specification**

### **CTC1 Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC, E Primary Accession Q2NKI3

Reactivity
Rost
Clonality
Calculated MW

Coloniary
Calculated MW

Coloniary

# 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>

# **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/19854131" target="\_blank">19854131</a>, PubMed:<a href="http://www.uniprot.org/citations/22863775" 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.

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

# CTC1 Polyclonal Antibody - Images