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TP1 Antibody
Catalog # ASC10123

Specification

TP1 Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q99973
Other Accession	AAC51107, 1848277
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**TP1 antibody can be used for detection of TP1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.**

TP1 Antibody - Additional Information

Gene ID **7011**

Other Names
TP1 Antibody: TP1, TLP1, p240, TROVE1, VAULT2, TP1, Telomerase protein component 1, Telomerase-associated protein 1, Telomerase protein 1, telomerase-associated protein 1

Target/Specificity
TEP1;

Reconstitution & Storage
TP1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
TP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TP1 Antibody - Protein Information

Name TEP1

Synonyms TLP1, TP1

Function
Component of the telomerase ribonucleoprotein complex that is essential for the replication of chromosome termini (PubMed:19179534). Also a component of the ribonucleoprotein vaults particle, a multi- subunit structure involved in nucleo-cytoplasmic transport (By similarity). Responsible for

the localizing and stabilizing vault RNA (vRNA) association in the vault ribonucleoprotein particle. Binds to TERC (By similarity).

Cellular Location
Nucleus. Chromosome, telomere.

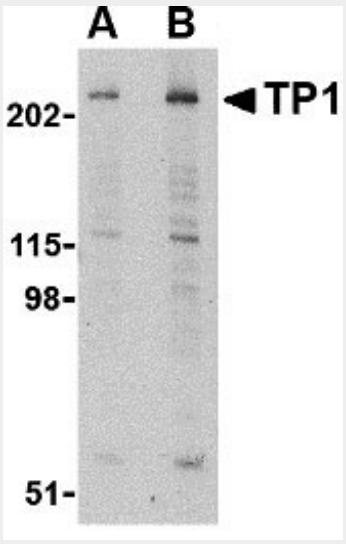
Tissue Location
Ubiquitous..

TP1 Antibody - Protocols

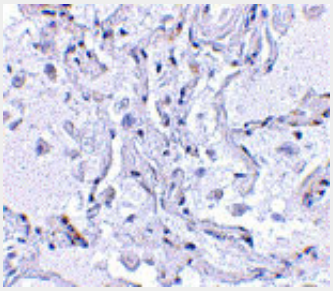
Provided below are standard protocols that you may find useful for product applications.

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

TP1 Antibody - Images

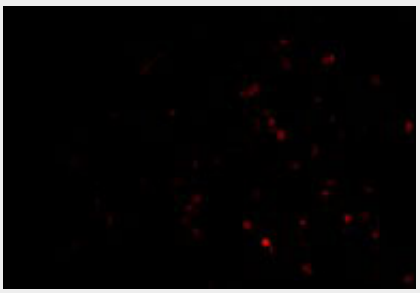


Western blot analysis of TP1 in human kidney tissue lysate with TP1 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemical staining of human lung tissue using TP1 antibody at 2.5 µg/mL.

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Immunofluorescence of TP-1 in Human Lung cells with TP-1 antibody at 20 µg/mL.

TP1 Antibody - Background

TP1 Antibody: Telomerase is an RNA-dependent DNA polymerase that uses an RNA component to add telomeric repeat sequences at the ends of chromosomes. Besides the RNA component which serves as the template that specifies the telomeric repeat, the telomerase complex contains a reverse transcriptase protein (TRT) and various accessory proteins including the telomerase-associated protein 1 (TP1). Telomerase activity is low in most somatic cells, causing the gradual shortening of telomeres which can ultimately lead to telomere fusion and cell death. High levels of telomerase activity are widely seen in cancerous cells and while recent experiments have suggested that telomerase may be a viable target in cancer therapy, expression levels of TP1 do not correlate with malignancy. At least two isoforms of TP1 are known to exist.

TP1 Antibody - References

Greider CW. Telomere length regulation. Annu. Rev. Biochem.1996; 274:92-7.
Cong YS, Wright WE, and Shay JW. Human telomerase and its regulation. Microbiol. Mol. Biol. Rev.2002; 66:407-25.
Harrington L, McPhail T, Mar V, et al. A mammalian telomerase-associated protein. Science1997; 275:973-7.
Wong JMY and Collins K. Telomere maintenance and disease. Lancet2003; 362:983-8.