

POT1 Polyclonal Antibody

Catalog # AP72003

Specification

POT1 Polyclonal Antibody - Product Information

Application Primary Accession Reactivity Host Clonality

WB 09NUX5 Human. Monkey Rabbit **Polyclonal**

POT1 Polyclonal Antibody - Additional Information

Gene ID 25913

Other Names

POT1; Protection of telomeres protein 1; hPot1; POT1-like telomere end-binding protein

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

POT1 Polyclonal Antibody - Protein Information

Name POT1

Function

Component of the telomerase ribonucleoprotein (RNP) complex that is essential for the replication of chromosome termini. Is a component of the double-stranded telomeric DNA-binding TRF1 complex which is involved in the regulation of telomere length by cis- inhibition of telomerase. Also acts as a single-stranded telomeric DNA- binding protein and thus may act as a downstream effector of the TRF1 complex and may transduce information about telomere maintenance and/or length to the telomere terminus. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded TTAGGG repeats added by telomerase and protects chromosome ends; without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways. Binds to two or more telomeric single-stranded 5'- TTAGGG-3' repeats (G-strand) and with high specificity to a minimal telomeric single-stranded 5'-TAGGGTTAG-3' sequence. Binds telomeric single-stranded sequences internally or at proximity of a 3'-end. Its activity is TERT dependent but it does not increase TERT activity by itself. In contrast, the ACD-POT1 heterodimer enhances telomere elongation by increasing telomerase processivity.



Tel: 858.875.1900 Fax: 858.875.1999

Cellular Location

Nucleus. Chromosome, telomere. Note=Colocalizes with telomeric DNA

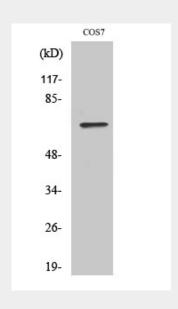
Tissue Location Ubiquitous.

POT1 Polyclonal Antibody - Protocols

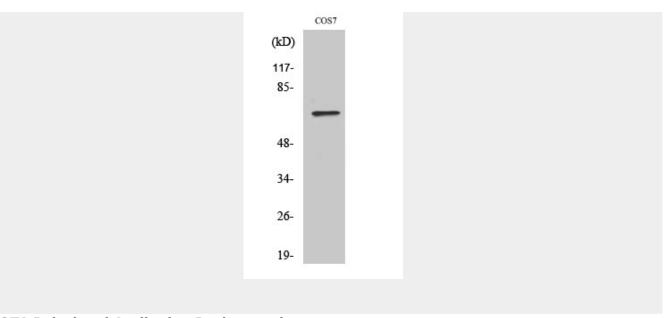
Provided below are standard protocols that you may find useful for product applications.

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

POT1 Polyclonal Antibody - Images







POT1 Polyclonal Antibody - Background

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