

POT1 antibody - middle region Rabbit Polyclonal Antibody Catalog # Al14282

Specification

POT1 antibody - middle region - Product Information

Application Primary Accession Other Accession Reactivity

Predicted

Host Clonality Calculated MW WB <u>O9NUX5</u> <u>NM_015450</u>, <u>NP_056265</u> Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog Human, Mouse, Pig, Horse, Bovine, Guinea Pig, Dog Rabbit Polyclonal 70kDa KDa

POT1 antibody - middle region - Additional Information

Gene ID 25913

Alias Symbol DKFZP586D211, hPot1, HPOT1 Other Names Protection of telomeres protein 1, hPot1, POT1-like telomere end-binding protein, POT1

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-POT1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions POT1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

POT1 antibody - middle region - 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.

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

Tissue Location Ubiquitous.

POT1 antibody - middle region - Protocols

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

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

POT1 antibody - middle region - Images



WB Suggested Anti-POT1 Antibody Titration: 0.2-1 µg/ml ELISA Titer: 1:1562500 Positive Control: THP-1 cell lysate

POT1 antibody - middle region - References

Baumann P., et al. Science 292:1171-1175(2001). Baumann P., et al. Mol. Cell. Biol. 22:8079-8087(2002). Ota T., et al. Nat. Genet. 36:40-45(2004). Hillier L.W., et al. Nature 424:157-164(2003). Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.