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**Product Name: POT1 Rabbit Polyclonal Antibody****Catalog #: APRab16380**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC
<b>Reactivity</b>	Human,Monkey
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:50-1:300
<b>Molecular Weight</b>	70kDa

**Antigen Information**

<b>Gene Name</b>	POT1
<b>Alternative Names</b>	POT1; Protection of telomeres protein 1; hPot1; POT1-like telomere end-binding protein
<b>Gene ID</b>	25913.0
<b>SwissProt ID</b>	Q9NUX5
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human POT1. AA range:247-296

**Background**

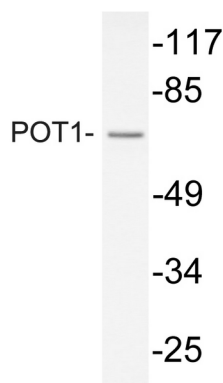
protection of telomeres 1(POT1) Homo sapiens This gene is a member of the telombin family and encodes a nuclear protein

involved in telomere maintenance. Specifically, this protein functions as a member of a multi-protein complex that binds to the TTAGGG repeats of telomeres, regulating telomere length and protecting chromosome ends from illegitimate recombination, catastrophic chromosome instability, and abnormal chromosome segregation. Increased transcriptional expression of this gene is associated with stomach carcinogenesis and its progression. Alternatively spliced transcript variants have been described. [provided by RefSeq, Jul 2008],alternative products:A number of isoforms are produced,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.,similarity:Belongs to the telombin family.,subcellular location:Colocalizes with telomeric DNA.,subunit:Homodimer or homooligomer. Component of the shelterin complex (telosome) composed of TERF1, TERF2, TINF2, TERF2IP, ACD and POT1. Binds single-stranded telomeric DNA as a monomer (By similarity). Component of the telomerase holoenzyme complex at least composed of TERT, DKC1, WDR79/TCAB1, NOP10, NHP2, GAR1, TEP1, EST1A, POT1 and a telomerase RNA template component (TERC). Found in a complex with TERF1, TINF2 and TNKS1. Interacts with TNKS1. Forms heterodimers with ACD.,tissue specificity:Ubiquitous.,

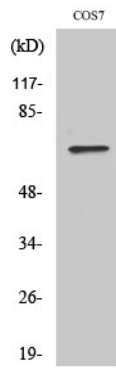
## Research Area

Epigenetics and Nuclear Signaling; DNA / RNA; DNA Synthesis; Cancer; Tumor biomarkers

## Image Data



Western blot analysis of lysate from COS7 cells, using POT1 antibody.



Western Blot analysis of various cells using POT1 Polyclonal Antibody.