

## POT1 Polyclonal Antibody

<b>Catalog No :</b>	YT3820
<b>Reactivity :</b>	Human;Monkey
<b>Applications :</b>	WB;IHC
<b>Target :</b>	POT1
<b>Gene Name :</b>	POT1
<b>Protein Name :</b>	Protection of telomeres protein 1
<b>Human Gene Id :</b>	25913
<b>Human Swiss Prot No :</b>	Q9NUX5
<b>Mouse Swiss Prot No :</b>	Q91WC1
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human POT1. AA range:247-296
<b>Specificity :</b>	POT1 Polyclonal Antibody detects endogenous levels of POT1 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000;IHC 1:50-300
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	70kD

**Background :** protection of telomeres 1 (POT1) Homo sapiens This gene is a member of the telomerase 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],

**Function :** 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

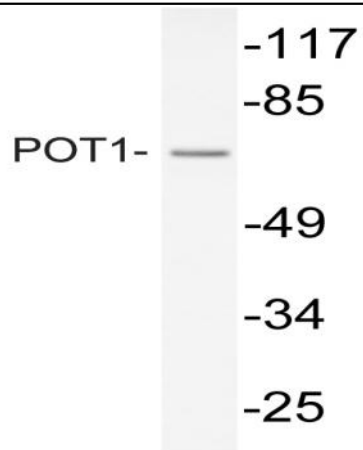
**Subcellular Location :** Nucleus . Chromosome, telomere . Colocalizes with telomeric DNA.

**Expression :** Ubiquitous.

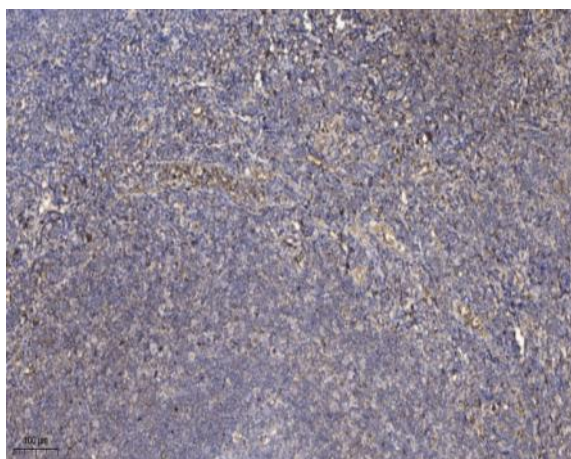
## Products Images



Western Blot analysis of various cells using POT1 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



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



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).