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Anti-POT1 Picoband Antibody

Catalog # ABO12466

Specification

Anti-POT1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	Q9NUX5
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Protection of telomeres protein 1(POT1) detection. Tested with WB in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-POT1 Picoband Antibody - Additional Information

Gene ID 25913

Other Names
Protection of telomeres protein 1, hPot1, POT1-like telomere end-binding protein, POT1

Calculated MW
71442 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Nucleus . Chromosome, telomere . Colocalizes with telomeric DNA.

Tissue Specificity
Ubiquitous. .

Protein Name
Protection of telomeres protein 1

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human POT1 (195-234aa RVLIQDLVLEGDLSHIHRLQNLTIDILVYDNHVHVARSLK), different from the related mouse sequence by eleven amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-POT1 Picoband 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.

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

Tissue Location
Ubiquitous.

Anti-POT1 Picoband 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

Anti-POT1 Picoband Antibody - Images

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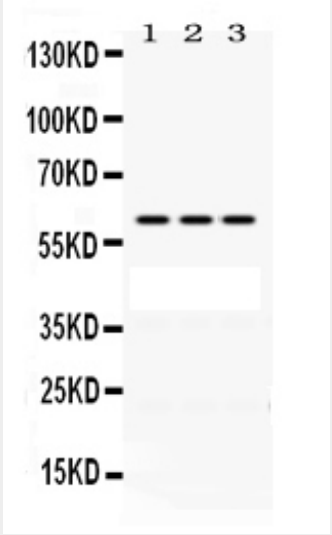

Anti- POT1 Picoband antibody, ABO12466, Western blottingAll lanes: Anti POT1 (ABO12466) at 0.5ug/mlLane 1: A431 Whole Cell Lysate at 40ugLane 2: HELA Whole Cell Lysate at 40ugLane 3: A549 Whole Cell Lysate at 40ugPredicted bind size: 60KDObserved bind size: 60KD

Anti-POT1 Picoband Antibody - Background

Protection of telomeres protein 1 is a protein that in humans is encoded by the POT1 gene. 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.