## For Research Use Only

## POT1 Recombinant antibody

Catalog Number:83732-2-RR



**Purification Method:** 

Protein A purification

Recommended Dilutions:

IF/ICC 1:125-1:500

CloneNo.:

240688E5

**Basic Information** 

Catalog Number: GenBank Accession Number:

83732-2-RR BC002923 GeneID (NCBI): 100ul, Concentration: 1000 ug/ml by 25913

Nanodrop: **UNIPROT ID:** Q9NUX5

Rabbit Full Name:

POT1 protection of telomeres 1 Isotype:

IgG homolog (S. pombe) Immunogen Catalog Number: Calculated MW: 71 kDa AG0875

**Applications** 

**Tested Applications:** IF/ICC, FC (Intra), ELISA

Species Specificity:

Positive Controls:

IF/ICC: HeLa cells,

## **Background Information**

Protection of telomeres 1(POT1) is a conserved protein that binds the G-rich stand of its own telomeric repeat sequence, with a role in protecting chromosome ends. It's housekeeping gene that is required to ensure the integrity of chromosome ends in all cells. It's a component of the telomerase ribonucleoprotein(RNP) complex that is esential for the replication of chromosome termini. It consists the TRF1 compex that is involved in the regulation of telomere length by cis-inhibition of telomerase. We have discovered that POT1 exists in at least three consistently occurring forms; 90, 70 and 45kDa. The unexpected molecular weights of POT1 seem to be associated with SUMO1 and ubiquitin conjugation; the latter occurring at a double lysine residue at 289-KK-290 (.PMID: 24054699)

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

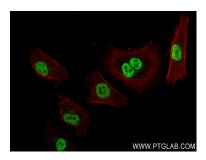
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

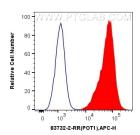
in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com

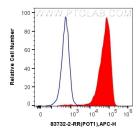
## Selected Validation Data



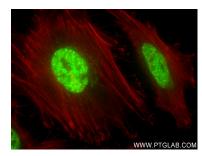
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using POT1 antibody (83732-2-RR, Clone: 240688E5) at dilution of 1:250 and CoraLite® 488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



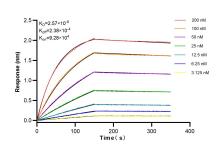
1x10^6 U2OS cells were intracellularly stained with 0.25 ug POT1 Recombinant antibody (83732-2-RR, Clone:240688E5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



1x10^6 SH-SY5Y cells were intracellularly stained with 0.25 ug POT1 Recombinant antibody (83732-2-RR, Clone:240688E5) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using POT1 antibody (83732-2-RR, Clone: 240688E5) at dilution of 1:250 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 83732-2-RR against Human POT1 were performed. The affinity constant is 2.57 nM.