

RAP1 Polyclonal Antibody

Catalog # AP72188

Product Information

Application WB, IHC-P Q9NYB0 **Primary Accession**

Reactivity Human, Rat, Mouse

Host Rabbit Clonality **Polyclonal** Calculated MW 44260

Additional Information

Gene ID 54386

Other Names TERF2IP; DRIP5; RAP1; PP8000; Telomeric repeat-binding factor 2-interacting

> protein 1; TERF2-interacting telomeric protein 1; TRF2-interacting telomeric protein 1; Dopamine receptor-interacting protein 5; Repressor/activator

protein 1 homol

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

-20°C **Storage Conditions**

Protein Information

Name TERF2IP

Synonyms DRIP5, RAP1

Function Acts both as a regulator of telomere function and as a transcription

> regulator. Involved in the regulation of telomere length and protection as a component of the shelterin complex (telosome). In contrast to other components of the shelterin complex, it is dispensible for telomere capping

and does not participate in the protection of telomeres against

non-homologous end-joining (NHEJ)- mediated repair. Instead, it is required to negatively regulate telomere recombination and is essential for repressing homology- directed repair (HDR), which can affect telomere length. Does not bind DNA directly: recruited to telomeric double-stranded 5'-TTAGGG-3' repeats via its interaction with TERF2. Independently of its function in telomeres, also acts as a transcription regulator: recruited to extratelomeric 5'-TTAGGG-3' sites via its association with TERF2 or other factors, and regulates gene expression. When cytoplasmic, associates with the

I-kappa-B-kinase (IKK) complex and acts as a regulator of the NF-kappa-B signaling by promoting IKK-mediated phosphorylation of RELA/p65, leading to activate expression of NF- kappa-B target genes.

Cellular Location Nucleus {ECO:0000250 | UniProtKB:Q91VL8}. Cytoplasm

{ECO:0000250|UniProtKB:Q91VL8}. Chromosome

{ECO:0000250 | UniProtKB:Q91VL8}. Chromosome, telomere

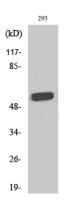
{ECO:0000250|UniProtKB:Q91VL8}. Note=Associates with chromosomes, both at telomeres and in extratelomeric sites. Also exists as a cytoplasmic form, where it associates with the IKK complex {ECO:0000250|UniProtKB:Q91VL8}

Tissue Location Ubiquitous. Highly expressed.

Background

Acts both as a regulator of telomere function and as a transcription regulator. Involved in the regulation of telomere length and protection as a component of the shelterin complex (telosome). In contrast to other components of the shelterin complex, it is dispensible for telomere capping and does not participate in the protection of telomeres against non-homologous end-joining (NHEJ)-mediated repair. Instead, it is required to negatively regulate telomere recombination and is essential for repressing homology-directed repair (HDR), which can affect telomere length. Does not bind DNA directly: recruited to telomeric double-stranded 5'-TTAGGG-3' repeats via its interaction with TERF2. Independently of its function in telomeres, also acts as a transcription regulator: recruited to extratelomeric 5'- TTAGGG-3' sites via its association with TERF2 or other factors, and regulates gene expression. When cytoplasmic, associates with the I-kappa-B-kinase (IKK) complex and acts as a regulator of the NF-kappa-B signaling by promoting IKK-mediated phosphorylation of RELA/p65, leading to activate expression of NF-kappa-B target genes.

Images



Western Blot analysis of various cells using RAP1 Polyclonal Antibody diluted at 1 : 500

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.