

RAP1 / TERF2IP antibody (mAb)

Catalog Nos: 61235, 61236

RRID: AB_2614994

Clone: 4C8

Isotype: IgG2b

Application(s): WB

Reactivity: Human

Quantities: 100 µg, 10 µg

Purification: Protein G Chromatography

Host: Mouse

Concentration: 1 µg/µl

Molecular Weight: 60 kDa

Background: **RAP1 / TERF2IP** (Repressor/activator protein 1, Telomeric repeat-binding factor 2-interacting protein 1) is a protein associated with telomeres that acts both as a modulator of telomere function and as a regulator of transcription. RAP1 is a component of the shelterin (telosome) protein complex and is involved in the regulation of telomere length and serves to protect telomeric repeats from degradation. In contrast to other components of the shelterin complex, RAP1 is dispensable for telomere end-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. RAP1 is recruited to telomeric repeats via its interaction with TERF2. Independent of its function in telomeres, RAP1 also acts as a transcriptional regulator. It is recruited to non-telomeric 5'-TTAGGG-3' sites via its association with TERF2 or other factors, and regulates gene expression. RAP1 is also present in the cytoplasm and associates with the IκB-kinase (IKK) complex and acts as a regulator of the NFκB signaling by promoting IKK-mediated phosphorylation of RELA/p65, leading to activation of the expression of NFκB target genes.

Immunogen: This RAP1 / TERF2IP antibody was raised against a protein corresponding to full-length human RAP1 / TERF2IP.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.