abcam

ab14404

Anti-RAP1/TERF2IP antibody [4c8/1]

Key facts

Isotype	IgG2b
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human TERF2IP. Database link Q9NYB0
Clone number	4c8/1
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	5 µg/mL
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1 µg for 10^6 Cells
Notes	ab91366 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody. ab170192 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information TERF2IP

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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks

Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

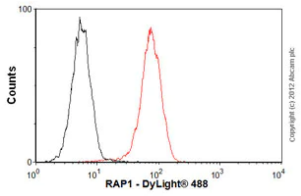
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

3 product images

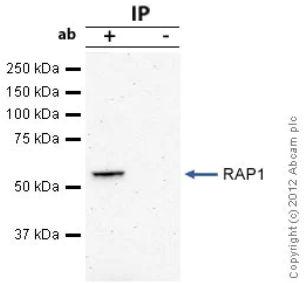


Flow Cytometry - Anti-RAP1/TERF2IP antibody [4c8/1] (ab14404)

RAP1/TERF2IP Flow Cytometry staining using mouse Anti-RAP1/TERF2IP antibody

Overlay histogram showing HeLa cells stained with ab14404 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab14404, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2b [PLPV219] (ab91366,

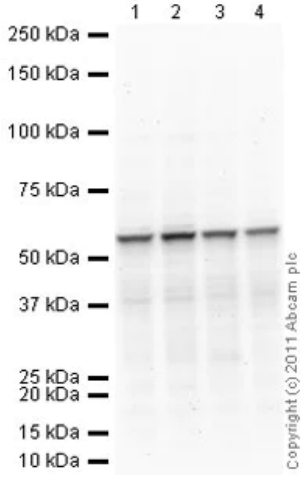
2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunoprecipitation - Anti-RAP1/TERF2IP antibody [4c8/1] (ab14404)

RAP1 was immunoprecipitated using 0.5mg Hela whole cell extract, 5µg of Mouse monoclonal to RAP1/TERF2IP and 50µl of protein G magnetic beads (+). No antibody was added to the control (-). The antibody was incubated under agitation with Protein G beads for 10min, Hela whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70ºC; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab14404.
Secondary: Goat polyclonal to mouse IgG light chain specific (HRP) at 1/5000 dilution.
Band: 55kDa; RAP1/TERF2IP
All lanes:
Immunoprecipitation - Anti-RAP1/TERF2IP antibody [4c8/1] (ab14404)

Predicted band size: 44 kDa



Western blot - Anti-RAP1/TERF2IP antibody [4c8/1] (ab14404)

All lanes:
Western blot - Anti-RAP1/TERF2IP antibody [4c8/1] (ab14404) at 5 µg/mL

Lane 1:
HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 20 µg

Lane 2:
HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 20 µg

Lane 3:
HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate at 20 µg

Lane 4:
A431 (Human epithelial carcinoma cell line) Whole Cell Lysate at 20 µg

Secondary

All lanes:
Goat polyclonal Secondary Antibody to Mouse IgG - H&L (HRP), pre-adsorbed at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 44 kDa

Observed band size: 55 kDa

Exposure time: 8min

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