

## TRF2 antibody (pAb)

**Catalog No:** 39223

**RRID:** AB\_2793193

**Application(s):** IP, WB

**Reactivity:** Human, Mouse, Rat

**Quantity:** 100 µg

**Purification:** Affinity Purified

**Host:** Goat

**Isotype:** IgG

**Concentration:** 0.5 µg/µl

**Molecular Weight:** 66 kDa

**Background:** TRF2 is a sequence-specific DNA binding protein that binds the duplex array of TTAGGG repeats at human telomeres. In particular, the telomere-binding protein TRF2 regulates both telomere protection and telomere length (end to end fusions are avoided through the formation of the t-loop). Telomere shortening is envisioned as a potent tumor suppressor mechanism. TRF2 is overexpressed in several human tumors, such as breast carcinomas, liver hepatocarcinomas, and lung carcinomas suggesting a general role in tumorigenesis. Removal of TRF2 results in the localization of active ATM to the unprotected telomeres, eventually inducing ATM-dependent apoptosis in telomerase-positive tumor cell lines. TRF2 has been shown to interact with ATM, through S1981 in an unphosphorylated state, and block its activation. It also interacts with several DNA repair proteins that are involved in human chromosomal instability syndromes characterized by premature aging and increased cancer. In particular, TRF2 interacts with Rap1, the WRN and BLM helicases, the DNA-PK complex, the MRE11/NBS1/Rad50 complex, PARP1 and PARP2 poly(ADP) ribosylases, and the ERCC1/XPF endonuclease.

**Immunogen:** This TRF2 antibody was raised against a full-length protein corresponding to human TRF2.

**Buffer:** PBS containing 0.2% gelatin and 0.05% sodium azide. Sodium azide is highly toxic.

### Application Notes:

Applications Validated by Active Motif:

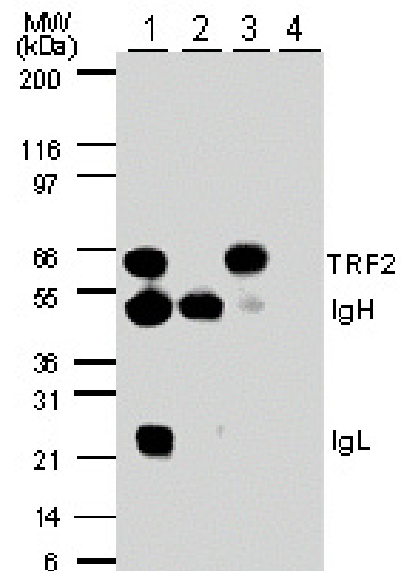
IP: 2 µg per IP

WB: 1 - 2 µg/ml dilution

For optimal results in Western blotting, primary antibody incubations should be performed at room temperature. The addition of 0.1% Tween 20 to all blocking solutions may also reduce background. Individual optimization may be required.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Store at 4°C for short term. 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.



### TRF2 pAb tested by Western blot.

Western Blot Analysis of TRF2 in HL-60 cells.  
 Lane 1. IP with a mouse anti-TRF2.  
 Lane 2. IP with control mouse IgG.  
 Lane 3 IP with TRF2 pAb (Cat. No. 39223.)  
 Lane 4. IP with pre-immune goat Ig.  
 Lanes 1-4. WB with mouse anti-TRF2.  
 TRF2 is detected as an ~ 66 kDa protein.