

TRF1

CONTACT INFORMATION: Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS: Validated
TYPE: rat anti mouse
CLONE NAME: 572C
PROTEIN: Mus musculus Telomeric repeat binding protein 1
PROTEIN WEB: <http://www.uniprot.org/uniprot/P70371>
ANTIGEN USED: mTRF1-His
FUSION PARTNER: NS1/Ag4-1 (NS1) cells
ISOTYPE: IgG2a
SPECIES REACTIVITY: mouse
PREPARATION AND STORAGE: Aliquot and store at 4C. Do not freeze

DESCRIPTION

Binds the telomeric double-stranded 5'-TTAGGG-3' repeat and negatively regulates telomere length. Involved in the regulation of the mitotic spindle. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded 5'-TTAGGG-3' repeats added by telomerase and protects chromosome ends; without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways.

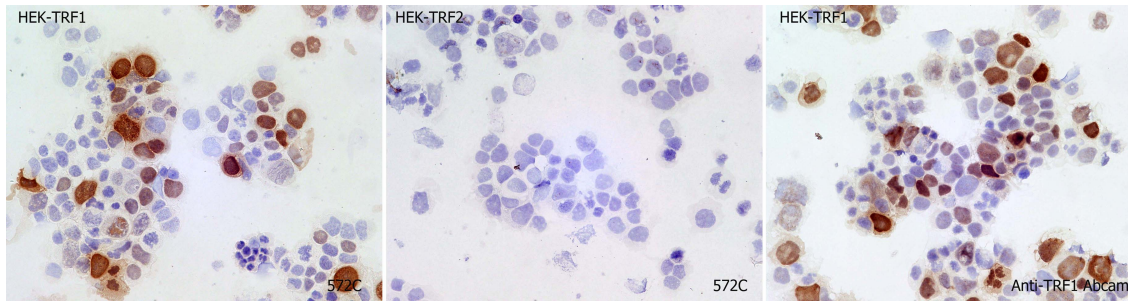
APPLICATIONS

| IHC Techniques | Clone | Dilution | Antibody concentration | Antigen retrieval method | Visualization kit | Positive control | Negative control | Protein localization | Positivity in other species |
|-----------------------------------|-------|-----------------------|------------------------|--------------------------|-------------------|------------------|------------------|----------------------|-----------------------------|
| Frozen tissue and cytopins | | | | | | | | | |
| Recommended | 572C | Undiluted supernatant | Supernatant | | | | | nuclear | |

Paraffin tissue

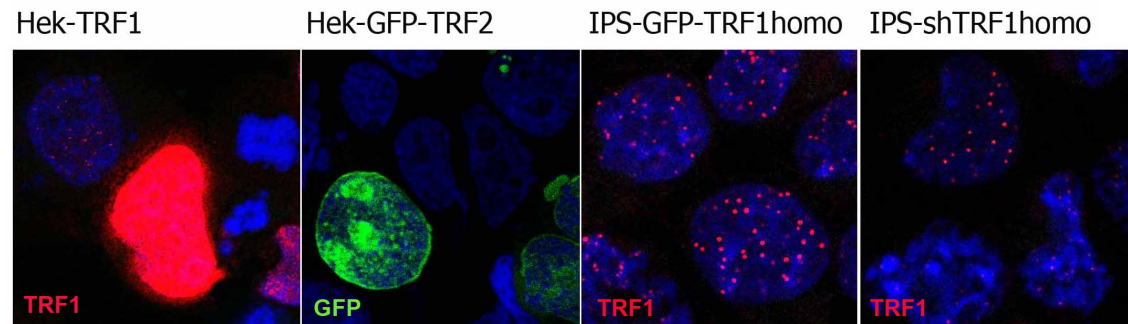
Immunofluorescence

| | | | | | | | | | |
|-------------|------|-----------------------|-------------|--|--|--|--|---------|--|
| Recommended | 572C | Undiluted supernatant | Supernatant | | | | | nuclear | |
|-------------|------|-----------------------|-------------|--|--|--|--|---------|--|



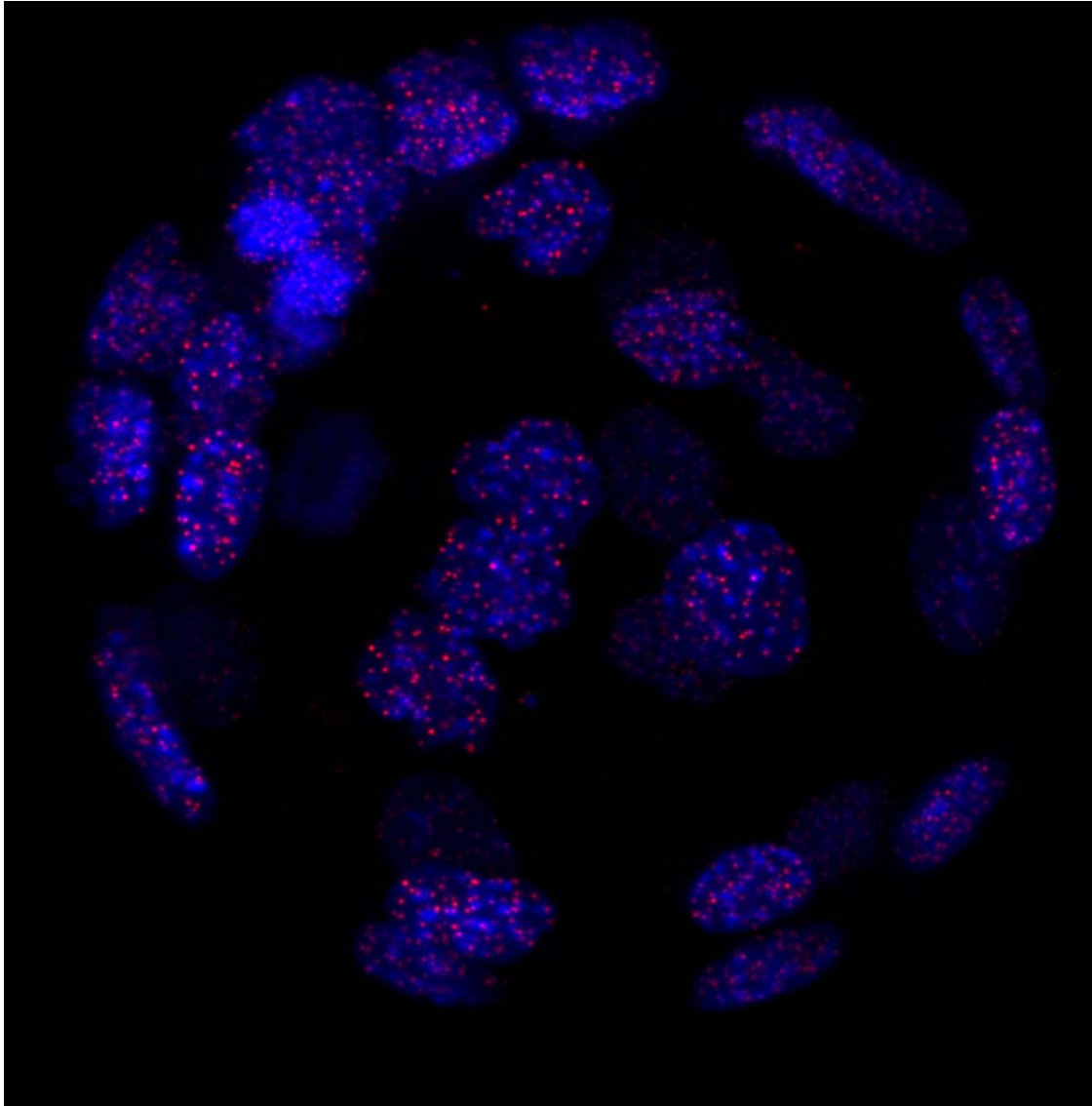
Anti-TRF1 antibody (572C) in transfected cells.

To confirm that 572C mAb recognized mouse TRF1 protein, immunohistochemistry on frozen cytopins preparations of mTRF1 expressed in Hek293T was performed. Hek293T-mTRF2-GFP was used as negative control. Anti-TRF1 Abcam antibody was used as positive control.



572C mAb is able to detect mouse TRF1 protein by immunofluorescence.

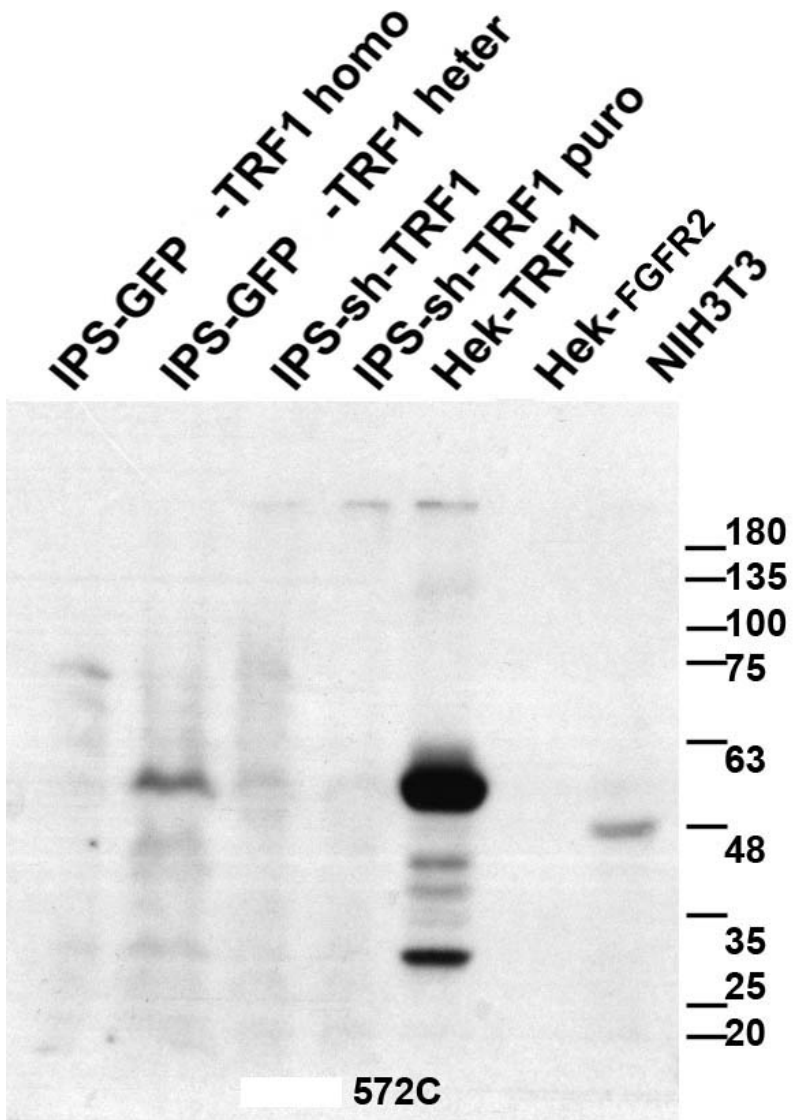
mTRF1- red
GFP - green
nuclei - blue



572C mAb is able to detect mouse TRF1 protein in a mouse blastocyst.

Monoclonal Antibodies Catalogue

| WB Techniques | Clone | Dilution | Antibody concentration | Positive control | Negative control | Expected MW | Observed Mw | Positivity in other species |
|----------------------------|-------|-----------------------|------------------------|------------------|------------------|-------------|-------------|-----------------------------|
| Western Blotting | | | | | | | | |
| Recommended | 572C | Undiluted supernatant | Supernatant | | | 47kDa | 50kDa | |
| Immunoprecipitation | | | | | | | | |



572C mAb is able to detect mouse TRF1 protein by WB

Lanes:

Lane 1 IPS-GFP-mTRF1 homo (100ug) (+)

Lane 2 IPS-GFP-mTRF1 heter (100ug) (+/-)

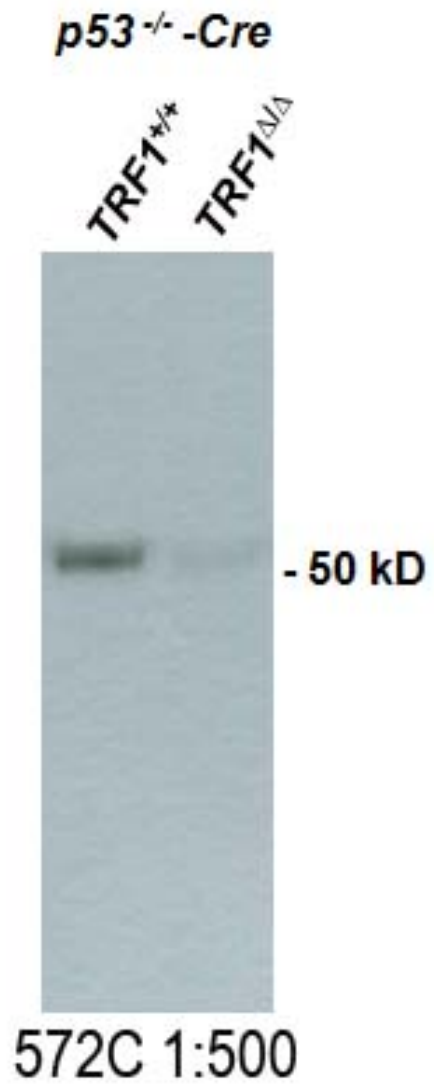
Lane 3 IPS-sh mTRF1 (100ug) (-)

Lane 4 IPS-sh mTRF1 puro (100ug) (-)

Lane 5 Hek-mTRF1 (20ug) (+)

Lane 6 Hek-FGFR2 (20ug) (-)

Lane 7 NIH-3T3 (100ug) (+)



572C mAb is able to detect mouse TRF1 protein by WB.

Lanes:

Lane 1 Mefs TRF1 +/- nuclear extract (30ug) (+)

Lane 2 Mefs TRF1 KO nuclear extract (30ug) (-)

Image kindly provided by Ianire Garrobo