

TRF1 | Validation File

TARGET Mus musculus Telomeric repeat binding protein 1 (TRF1)

CLONE NAME 572C

DESCRIPTION Rat monoclonal

ANTIGEN USED mTRF1-His

ISOTYPE IgG2a

SPECIES REACTIVITY mouse

LOCALIZATION nuclear

POSITIVE CONTROL iPS cells

STORAGE BUFFER Tissue culture supernatant: 0.02% sodium azide

Purified antibody: PBS plus 1%BSA and 0.02% sodium azide. MAb concentration: 1mg/ml

STORAGE Aliquot and store at 4C. Do not freeze

 Recommended

 Inconclusive

 Not Recommended

 Not Tested

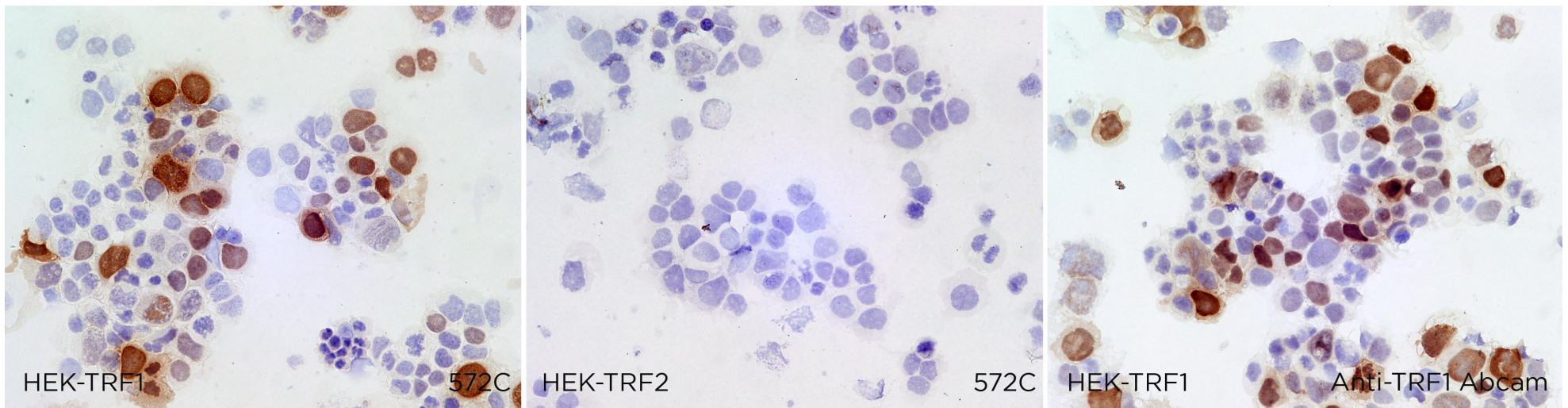
APPLICATIONS

● | ICC | Immunocytochemistry

572C is able to detect mouse TRF1 protein in immunocytochemistry

DILUTION neat supernatant

To confirm that 572C mAb recognizes mouse TRF1 protein, immunocytochemistry on frozen cytospin preparations of mTRF1 and mTRF2 expressed in Hek293T cell line was performed. Anti-TRF1 Abcam antibody was used as positive control.



● | WB | **Western Blotting**

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

DILUTION neat supernatant
1:500 purified (purified antibody 1mg/ml)

Predicted molecular weight: **47kDa**
Observed molecular weight: **50kDa**

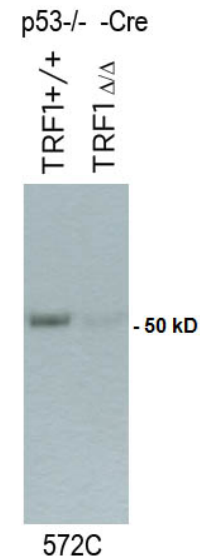
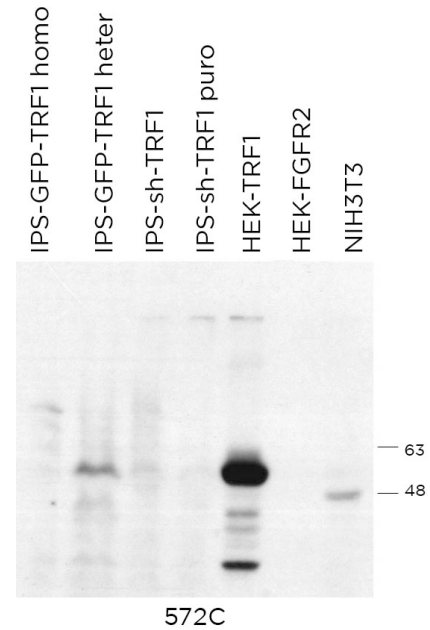
LANES

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) (+)

LANES

Lane 1	Mefs TRF1 +/+ nuclear extract	(30ug) (+)
Lane 2	Mefs TRF1 KO nuclear extract	(30ug) (-)

Image kindly provided by Ianire Garrobo

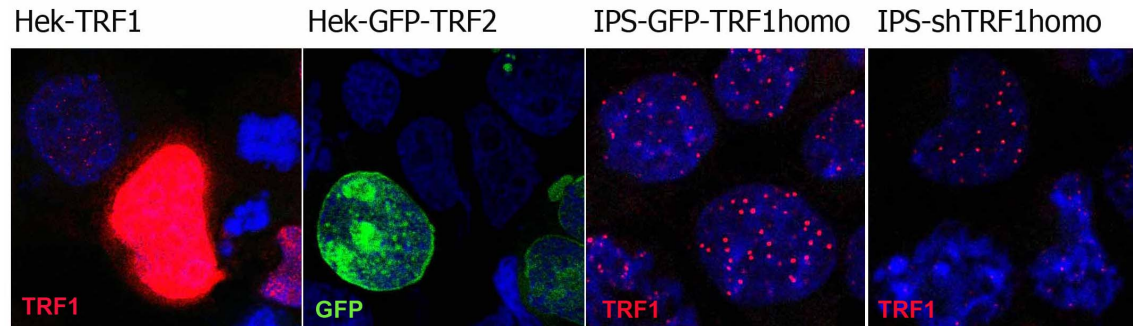


● | IF | **Immunofluorescence (paraffin)**

572C mAb can be used to detect mouse TRF1 protein by immunofluorescence

SAMPLE HEK-mTRF1, HEK-GFP-mTRF2, IPS-GFP-mTRF1homo and IPS-shmTRF1homo cell lines

DILUTION neat supernatant



SAMPLE Mefs

DILUTION 1:500 purified antibody (Lot. 226)

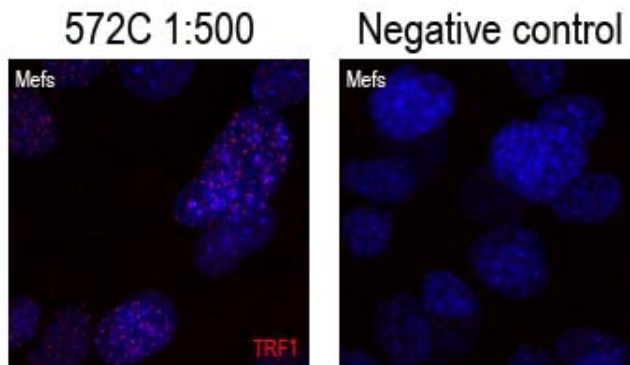
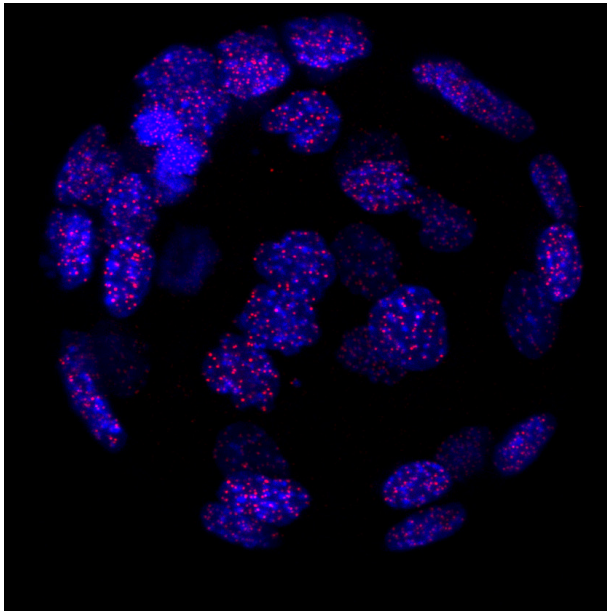


Image kindly provided by Juanma Povedano

SAMPLE mouse blastocyste
DILUTION 1:100 purified antibody



- | IHC-F | **Immunohistochemistry (frozen)** Not tested
- | IHC-P | **Immunohistochemistry (paraffin)** Not tested
- | FC | **Flow Cytometry** Not tested
- | IP | **Immunoprecipitation** Not Tested

SOLD BY: Abcam

REFERENCES

Méndez-Pertuz M, Martínez P, Blanco C, Gomez-Casero E, Garcia AB, Martínez-Torrecedrada JL, Palafox M, Cortés J, Serra V, Pastor J. and Blasco MA. Modulation of telomere protection by the PI3K/AKT pathway. *Nature Communications*, doi: 10.1038/s41467-017-01329-2 (2017).

García-Beccaria M, Martínez P, Méndez-Pertuz M, Martínez S, Blanco-Aparicio C, Cañamero M, Mulero F, Ambrogio C, Flores JM, Megias D, Barbacid M, Pastor J and Blasco MA. Therapeutic inhibition of TRF1 impairs the growth of p53-deficient K-RASG12V-induced lung cancer by induction of telomeric DNA damage. *EMBO Molecular Medicine*, 7:930-949 (2015).