

TERF2 Monoclonal antibody

Catalog Number: 66893-1-Ig 5 Publications

Basic Information

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|--------------------------------------|---|---|
| Catalog Number: 66893-1-Ig | GenBank Accession Number: BC024890 | Purification Method: Protein A purification |
| Size: 1000 µg/ml | GeneID (NCBI): 7014 | CloneNo.: 5B1E1 |
| Source: Mouse | UNIPROT ID: Q15554 | Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 |
| Isotype: IgG1 | Full Name: telomeric repeat binding factor 2 | |
| Immunogen Catalog Number: AG28513 | Calculated MW: 56 kDa Observed MW: 60-65.32-35 kDa | |

Applications

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| Tested Applications: WB, IHC, ELISA | Positive Controls: |
| Cited Applications: WB, IF, ChIP | WB : Jurkat cells, MCF-7 cells, HT-29 cells, K-562 cells, HEK-293 cells, Daudi cells, HSC-T6 cells, NIH/3T3 cells, 4T1 cells |
| Species Specificity: Human, mouse, rat | IHC : human gliomas tissue, rat brain tissue, mouse brain tissue |
| Cited Species: human, mouse | |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

Background Information

TERF2, also named as TRF2 and Telomeric repeat-binding factor 2, is a 542 amino acid protein, which contains 1 HTH myb-type DNA-binding domain and localizes in the Nucleus. TRF2 binds the telomeric double-stranded 5'-TTAGGG-3' repeat and plays a central role in telomere maintenance and protection against end-to-end fusion of chromosomes. TERF2 is a component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. TERF2 together with DCLRE1B/Apollo, is required to control the amount of DNA topoisomerase (TOP1, TOP2A and TOP2B), which is needed for telomere replication during fork passage and prevent aberrant telomere topology. TERF2 recruits TERF2IP/RAP1 to telomeres, thereby participating in to repressing homology-directed repair (HDR), which can affect telomere length. TERF2 exists some isoforms with MV 60 kDa and 32 kDa.

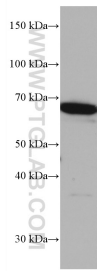
Notable Publications

| Author | Pubmed ID | Journal | Application |
|---------------|-----------|-----------------|-------------|
| Xiaoyu Qi | 35837283 | Front Pharmacol | WB |
| Ji Hoon Lee | 34321211 | Sci Adv | IF |
| Yi-Xiang Hong | 39511427 | Exp Mol Med | WB |

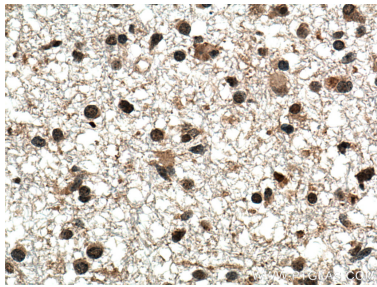
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

Selected Validation Data



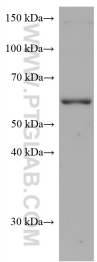
MCF-7 cells were subjected to SDS PAGE followed by western blot with 66893-1-Ig (TERF2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



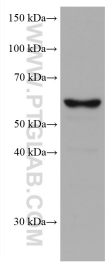
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66893-1-Ig (TERF2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



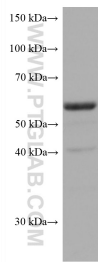
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 66893-1-Ig (TERF2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



HEK-293 cells were subjected to SDS PAGE followed by western blot with 66893-1-Ig (TERF2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Jurkat cells were subjected to SDS PAGE followed by western blot with 66893-1-Ig (TERF2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



4T1 cells were subjected to SDS PAGE followed by western blot with 66893-1-Ig (TERF2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.