

TRF4 (2794C4a): sc-81637

BACKGROUND

DNA replication, recombination and repair, all of which are necessary for genomic stability, require the presence of exonucleases. In DNA replication, these enzymes are involved in the processing of Okazaki fragments, whereas in DNA repair, they function to excise damaged DNA fragments and correct recombinational mismatches. These exonucleases include the family of DNA polymerases. TRF4 (topoisomerase-related function protein 4-1), also known as POLS (polymerase sigma), POLK (polymerase kappa) or LAK-1, is a member of the Y-family of translesion DNA polymerases and is involved in DNA replication and repair. In addition, TRF4 may be involved in the cohesion of sister chromatids in association with the replication fork. Once replicated, sister chromatids must be held together until anaphase to ensure accurate chromosome segregation.

REFERENCES

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- Carson, D.R. and Christman, M.F. 2001. Evidence that replication fork components catalyze establishment of cohesion between sister chromatids. *Proc. Natl. Acad. Sci. USA* 98: 8270-8275.
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CHROMOSOMAL LOCATION

Genetic locus: PAPD7 (human) mapping to 5p15.31; Papd7 (mouse) mapping to 13 C1.

SOURCE

TRF4 (2794C4a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the C-terminal region of TRF4 of human origin.

PRODUCT

Each vial contains 100 μ g in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

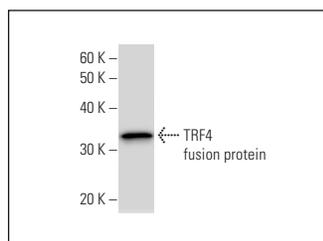
APPLICATIONS

TRF4 (2794C4a) is recommended for detection of TRF4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for TRF4 siRNA (h): sc-91936, TRF4 siRNA (m): sc-154635, TRF4 shRNA Plasmid (h): sc-91936-SH, TRF4 shRNA Plasmid (m): sc-154635-SH, TRF4 shRNA (h) Lentiviral Particles: sc-91936-V and TRF4 shRNA (m) Lentiviral Particles: sc-154635-V.

Molecular Weight of TRF4: 60 kDa.

DATA



TRF4 (2794C4a): sc-81637. Western Blot analysis of human recombinant TRF4 fusion protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

For research use only, not for use in diagnostic procedures.