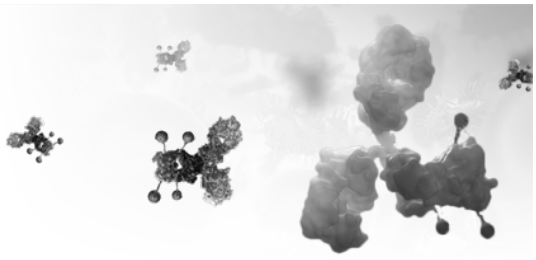

Mouse anti-Human TRF2 monoclonal antibody, clone 47/USG3 (CABT-B9353)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human TRF2 aa. 316-427
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human, Dog
Clone	47/USG3
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Concentration	250 μg/ml
Size	50 μg
Buffer	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	Telomeres, the physical ends of eukaryotic chromosomes, consist of tracts of TTAGGG repeats

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

	that end in 3' single strand protrusions called G-strand overhangs. TRF2 (TTAGGG Repeat binding Factor-2) and TRF1 are two proteins that bind the TTAGGG repeats of mammalian telomeres. Both proteins are ubiquitously expressed and exhibit a similar overall structure with a C-terminal DNA binding motif related to the protooncogene Myb and an N-terminal putative dimerization domain. While TRF1 is a negative regulator of telomere length maintenance, TRF2 is involved in the protection of chromosome ends from end-to-end fusion. Telomere integrity is maintained through the formation of "t loops" which are made by the insertion of the G-strand overhang into the duplex repeat region. This structural alteration is mediated by TRF2 and is the primary mechanism for the sequestration and protection of telomeres from DNA damage responses. Cells that lack functional TRF2 undergo loss of G-strand overhangs, innapropriate DNA repair resulting in end-to-end chromosome fusion, cell cycle arrest and apoptosis. Thus, TRF2 is a unique and vital component for the maintenance of chromosome structure and function.
Keywords	TERF2; telomeric repeat binding factor 2; TRF2; TRBF2; telomeric repeat-binding factor 2; telomeric DNA-binding protein; TTAGGG repeat-binding factor 2; telomeric repeat binding protein 2;

GENE INFORMATION

Entrez Gene ID	7014
UniProt ID	Q15554

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221