**BACKGROUND**

Telomerase is an RNA-dependent DNA polymerase that catalyzes the addition of telomeric repeat sequences to chromosome ends. In most human somatic cells, telomerase activity is undetectable, and telomeres shorten with successive cell divisions. However, telomerase activity is detectable in immortal cells and in many human tumors. Two candidate mammalian telomerase proteins have been cloned. Human TP1 (for telomerase-associated protein 1), also designated TLTP1 in rat (for telomerase protein component 1), is homologous to the Tetrahymena p80 telomerase RNA. Human TERT (for telomerase reverse transcriptase), also designated hEST2 (for ever shorter telomeres), is homologous to the p123 telomerase protein from Euplotes and to the yeast Est2 protein. Expression of TERT mRNA has been shown to correlate with telomerase activity in various cell lines.

**CHROMOSOMAL LOCATION**

Genetic locus: TERT (human) mapping to 5p15.33; Tert (mouse) mapping to 13 C1.

**SOURCE**

TERT (C-12) is a mouse monoclonal antibody raised against amino acids 900-1130 mapping at the C-terminus of TERT of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂κ light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

TERT (C-12) is available conjugated to agarose (sc-377511 AC), 500 µg/0.25 ml agarose in 1 ml, for IP, to either phycoerythrin (sc-377511 PE), fluorescein (sc-377511 FITC), Alexa Fluor® 488 (sc-377511 AF488), Alexa Fluor® 546 (sc-377511 AF546), Alexa Fluor® 594 (sc-377511 AF594) or Alexa Fluor® 647 (sc-377511 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor® 680 (sc-377511 AF680) or Alexa Fluor® 790 (sc-377511 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

TERT (C-12) is recommended for detection of TERT of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1:2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of TERT: 120 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

**DATA**

**SELECT PRODUCT CITATIONS**


**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

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