Anti-Telomerase reverse transcriptase Antibody [JF0586]

ET1702-22



Product Type: Recombinant Rabbit monoclonal IgG, primary antibodies

Species reactivity: Human

Applications: WB, FC

Molecular Wt: 127/120/90/89 kDa

Clone number: JF0586

Description: 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 TLP1 in rat (for telomerase protein component 1), is homologous to the Tetrahymena p80 telomerase protein and has been shown to interact with mammalian 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.

Immunogen: Synthetic peptide within human Telomerase reverse transcriptase aa 1090-1132/1132.

Positive control: Hela.

Subcellular location: Nucleus, Chromosome, Cytoplasm.

Database links: SwissProt: O14746 Human

Recommended Dilutions:

WB 1:1,000-1:2,000 **FC** 1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw

cycles.

Purity: Protein A affinity purified.



Images

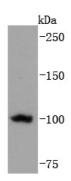


Fig1: Western blot analysis of Telomerase reverse transcriptase on Hela cell lysates with Rabbit anti-Telomerase reverse transcriptase antibody (ET1702-22) at 1/500 dilution.

Lysates/proteins at 10 µg/Lane.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDW/TBST for 1 hour at room temperature. The primary antibody (ET1702-22) at 1/500 dilution was used in 5% NFDW/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

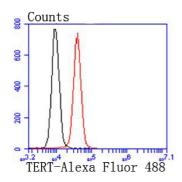


Fig2: Flow cytometric analysis of Hela cells with TERT antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Yang Y et al. MR molecular imaging of tumours using ferritin heavy chain reporter gene expression mediated by the hTERT promoter. Eur Radiol 26:4089-4097 (2016).
- 2. Patel PL et al. Derepression of hTERT gene expression promotes escape from oncogene-induced cellular senescence. Proc Natl Acad Sci U S A 113:E5024-33 (2016).

