

Goat Anti-TERF1 / PIN2 Antibody

Peptide-affinity purified goat antibody Catalog # AF2079a

Specification

Goat Anti-TERF1 / PIN2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>P54274</u> <u>NP_059523, 7013</u> Human Pig Goat Polyclonal 100ug/200ul IgG 50246

Goat Anti-TERF1 / PIN2 Antibody - Additional Information

Gene ID 7013

Other Names Telomeric repeat-binding factor 1, NIMA-interacting protein 2, TTAGGG repeat-binding factor 1, Telomeric protein Pin2/TRF1, TERF1, PIN2, TRBF1, TRF, TRF1

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat Anti-TERF1 / PIN2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-TERF1 / PIN2 Antibody - Protein Information

Name TERF1

Synonyms PIN2, TRBF1, TRF, TRF1



Function

Binds the telomeric double-stranded 5'-TTAGGG-3' repeat and negatively regulates telomere length. Involved in the regulation of the mitotic spindle. Component of the shelterin complex (telosome) that is involved in the regulation of telomere length and protection. Shelterin associates with arrays of double-stranded 5'-TTAGGG-3' repeats added by telomerase and protects chromosome ends; without its protective activity, telomeres are no longer hidden from the DNA damage surveillance and chromosome ends are inappropriately processed by DNA repair pathways.

Cellular Location

Nucleus. Cytoplasm, cytoskeleton, spindle. Chromosome, telomere. Note=Colocalizes with telomeric DNA in interphase and prophase cells. Telomeric localization decreases in metaphase, anaphase and telophase. Associates with the mitotic spindle (PubMed:11943150). Colocalizes with TRIOBP isoform 1 at the telomeres in interphase (PubMed:24692559)

Tissue Location

Highly expressed and ubiquitous. Isoform Pin2 predominates

Goat Anti-TERF1 / PIN2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-TERF1 / PIN2 Antibody - Images



AF2079a staining (2 μ g/ml) of HeLa lysate (RIPA buffer, 30 μ g total protein per lane). Primary incubated for 12 hour. Detected by western blot using chemiluminescence.

Goat Anti-TERF1 / PIN2 Antibody - Background



This gene encodes a telomere specific protein which is a component of the telomere nucleoprotein complex. This protein is present at telomeres throughout the cell cycle and functions as an inhibitor of telomerase, acting in cis to limit the elongation of individual chromosome ends. The protein structure contains a C-terminal Myb motif, a dimerization domain near its N-terminus and an acidic N-terminus. Two transcripts of this gene are alternatively spliced products.

Goat Anti-TERF1 / PIN2 Antibody - References

Telomere length and genetic analyses in population-based studies of endometrial cancer risk. Prescott J, et al. Cancer, 2010 Sep 15. PMID 20549820.

TRF1 mediates mitotic abnormalities induced by Aurora-A overexpression. Ohishi T, et al. Cancer Res, 2010 Mar 1. PMID 20160025.

Structural basis of selective ubiquitination of TRF1 by SCFFbx4. Zeng Z, et al. Dev Cell, 2010 Feb 16. PMID 20159592.

Expression of TRF1, TRF2, TIN2, TERT, KU70, and BRCA1 proteins is associated with telomere shortening and may contribute to multistage carcinogenesis of gastric cancer. Hu H, et al. J Cancer Res Clin Oncol, 2010 Sep. PMID 20127252.

The human telomeric protein hTRF1 induces telomere-specific nucleosome mobility. Pisano S, et al. Nucleic Acids Res, 2010 Apr. PMID 20056655.