

STK33 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7681a

Specification

STK33 Antibody (C-term) - Product Information

Application Primary Accession Reactivity	IHC-P, WB,E <u>Q9BYT3</u> Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	57831
Antigen Region	476-506

STK33 Antibody (C-term) - Additional Information

Gene ID 65975

Other Names Serine/threonine-protein kinase 33, STK33

Target/Specificity

This STK33 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 476-506 amino acids from the C-terminal region of human STK33.

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

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

Precautions STK33 Antibody (C-term) is for research use only

STK33 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

STK33 Antibody (C-term) - Protein Information

Name STK33 {ECO:0000303|PubMed:34155512}

Function Serine/threonine protein kinase required for spermatid differentiation and male fertility



(PubMed:<u>37146716</u>, PubMed:<u>38781365</u>). Promotes sperm flagella assembly during spermatogenesis by mediating phosphorylation of fibrous sheath proteins AKAP3 and AKAP4 (By similarity). Also phosphorylates vimentin/VIM, thereby regulating the dynamic behavior of the intermediate filament cytoskeleton (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q924X7}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q924X7}. Cytoplasm, perinuclear region {ECO:0000250|UniProtKB:Q924X7}. Note=Colocalizes with the caudal end of the manchette, a transient structure that guides tail elongation in elongating spermatids {ECO:0000250|UniProtKB:Q924X7}

Tissue Location

Highly expressed in testis, fetal lung and heart, followed by pituitary gland, kidney, interventricular septum, pancreas, heart, trachea, thyroid gland and uterus. Weak hybridization signals were observed in the following tissues: amygdala, aorta, esophagus, colon ascending, colon transverse, skeletal muscle, spleen, peripheral blood leukocyte, lymph node, bone marrow, placenta, prostate, liver, salivary gland, mammary gland, some tumor cell lines, fetal brain, fetal liver, fetal spleen and fetal thymus. No signal at all was detectable in RNA from tissues of the nervous system

STK33 Antibody (C-term) - Protocols

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

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

STK33 Antibody (C-term) - Images



STK33-T481 (Cat. #AP7681a) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the STK33 antibody detected the STK33 protein (arrow).





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

STK33 Antibody (C-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

STK33 Antibody (C-term) - References

Blume-Jensen P, et al. Nature 2001. 411: 355. Cantrell D, J. Cell Sci. 2001. 114: 1439. Jhiang S Oncogene 2000. 19: 5590. Manning G, et al. Science 2002. 298: 1912. Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359. Robertson, S. et al. Trends Genet. 2000. 16: 368. Robinson D, et al. Oncogene 2000. 19: 5548. Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889. Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561. Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271.