

Goat Anti-SEPT7 Antibody

Peptide-affinity purified goat antibody Catalog # AF1971a

Specification

Goat Anti-SEPT7 Antibody - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>Q16181</u> <u>NP_001011553</u>, <u>989</u>, <u>235072 (mouse)</u>, <u>64551</u> (<u>rat)</u> Human Mouse, Rat, Pig, Dog, Horse Goat Polyclonal 100ug/200ul IgG 50680

Goat Anti-SEPT7 Antibody - Additional Information

Gene ID 989

Other Names Septin-7, CDC10 protein homolog, SEPT7, CDC10

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-SEPT7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SEPT7 Antibody - Protein Information

Name SEPTIN7 (HGNC:1717)

Synonyms CDC10, SEPT7



Function

Filament-forming cytoskeletal GTPase. Required for normal organization of the actin cytoskeleton. Required for normal progress through mitosis. Involved in cytokinesis. Required for normal association of CENPE with the kinetochore. Plays a role in ciliogenesis and collective cell movements. Forms a filamentous structure with SEPTIN12, SEPTIN6, SEPTIN2 and probably SEPTIN4 at the sperm annulus which is required for the structural integrity and motility of the sperm tail during postmeiotic differentiation (PubMed:25588830).

Cellular Location

Cytoplasm. Chromosome, centromere, kinetochore Cytoplasm, cytoskeleton, spindle Cleavage furrow. Midbody. Cytoplasm, cytoskeleton, cilium axoneme. Cell projection, cilium, flagellum. Note=Distributed throughout the cytoplasm in prometaphase cells. Associated with the spindle during metaphase. Associated with the central spindle and at the cleavage furrow in anaphase cells. Detected at the midbody in telophase Associated with actin stress fibers (By similarity). Found in the sperm annulus (PubMed:25588830). {ECO:0000250, ECO:0000269]PubMed:25588830}

Tissue Location Widely expressed..

Goat Anti-SEPT7 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-SEPT7 Antibody - Images

250kDa 150kDa 100kDa 75kDa 50kDa
37kDa
25kDa 20kDa
15kDa

AF1971a (0.5 μ g/ml) staining of nuclear HeLa lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-SEPT7 Antibody - Background

This gene encodes a protein that is highly similar to the CDC10 protein of Saccharomyces



cerevisiae. The protein also shares similarity with Diff 6 of Drosophila and with H5 of mouse. Each of these similar proteins, including the yeast CDC10, contains a GTP-binding motif. The yeast CDC10 protein is a structural component of the 10 nm filament which lies inside the cytoplasmic membrane and is essential for cytokinesis. Although the exact function of this gene has not yet been determined, its high similarity to yeast CDC10 and the high conservative nature of eukaryotic cell cycle machinery suggest a similar role to that of its yeast counterpart. Alternative splicing results in two transcript variants encoding different isoforms.

Goat Anti-SEPT7 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Overexpression of septin 7 suppresses glioma cell growth. Jia ZF, et al. J Neurooncol, 2010 Jul. PMID 20035367.

Upregulation of SEPT7 gene inhibits invasion of human glioma cells. Xu S, et al. Cancer Invest, 2010 Mar. PMID 19916744.

[Expression of cell cycle molecules in human azoospermic testes] Yang B, et al. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi, 2009 May. PMID 19426592.

[Study on the anti-invasion effect of SEPT7 gene for U251MG glioma cell in vitro] Xu S, et al. Zhonghua Yi Xue Yi Chuan Xue Za Zhi, 2008 Jun. PMID 18543212.