

CAPE Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2276a

Specification

CAPE Antibody (C-Term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Concentration Isotype Calculated MW WB, E <u>O95347</u> <u>NP_006435.2</u>, <u>10592</u> Human Goat Polyclonal 0.5 mg/ml IgG 135656

CAPE Antibody (C-Term) - Additional Information

Gene ID 10592

Other Names

Structural maintenance of chromosomes protein 2, SMC protein 2, SMC-2, Chromosome-associated protein E, hCAP-E, XCAP-E homolog, SMC2, CAPE, SMC2L1

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

Format 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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 CAPE Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

CAPE Antibody (C-Term) - Protein Information

Name SMC2

Synonyms CAPE, SMC2L1

Function

Central component of the condensin complex, a complex required for conversion of interphase



chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases.

Cellular Location

Nucleus. Cytoplasm. Chromosome. Note=In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase cells. During mitosis, most of the condensin complex is associated with the chromatin. At the onset of prophase, the regulatory subunits of the complex are phosphorylated by CDC2, leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase

CAPE Antibody (C-Term) - 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>

CAPE Antibody (C-Term) - Images



AF2276a (0.2 μ g/ml) staining of HeLa lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

CAPE Antibody (C-Term) - Background

Reported variants NP_006435.2, NP_001036015.1 and NP_001036016.1 represent identical protein

CAPE Antibody (C-Term) - References



Identification of two distinct human SMC protein complexes involved in mitotic chromosome dynamics. Schmiesing JA, Ball AR Jr, Gregson HC, Alderton JM, Zhou S, Yokomori K. Proc Natl Acad Sci U S A 1998 Oct 27;95(22):12906-11 PMID: 9789013