

SMC6 Antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al15058

Specification

SMC6 Antibody - C-terminal region - Product Information

Application WB
Primary Accession Q96SB8

Other Accession <u>NM 024624, NP 078900</u>

Reactivity Human, Mouse, Rat, Rabbit, Pig, Horse,

Yeast, Bovine, Guinea Pig, Dog

Predicted Human, Mouse, Rat, Rabbit, Pig, Horse,

Yeast, Bovine, Guinea Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 126kDa KDa

SMC6 Antibody - C-terminal region - Additional Information

Gene ID 79677

Alias Symbol FLJ22116, FLJ35534, SMC6L1

Other Names

Structural maintenance of chromosomes protein 6, SMC protein 6, SMC-6, hSMC6, SMC6, SMC6L1

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-SMC6 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

SMC6 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

SMC6 Antibody - C-terminal region - Protein Information

Name SMC6

Synonyms SMC6L1

Function

Core component of the SMC5-SMC6 complex, a complex involved in DNA double-strand breaks by homologous recombination. The complex may promote sister chromatid homologous recombination by recruiting the SMC1-SMC3 cohesin complex to double-strand breaks. The complex is required for telomere maintenance via recombination in ALT (alternative lengthening of telomeres) cell lines and mediates sumoylation of shelterin complex (telosome) components which



is proposed to lead to shelterin complex disassembly in ALT-associated PML bodies (APBs). Required for recruitment of telomeres to PML nuclear bodies. SMC5-SMC6 complex may prevent transcription of episomal DNA, such as circular viral DNA genome (PubMed:26983541).

Cellular Location

Nucleus speckle. Chromosome {ECO:0000250|UniProtKB:Q924W5}. Nucleus, PML body. Chromosome, telomere. Note=Colocalizes with SMC5 on the X-Y chromosome pair within the sex vesicle during late pachytene/diplotene (By similarity). Localizes to PML nuclear bodies in ALT cell lines (PubMed:17589526). Associates with chromatin (PubMed:25931565). Accumulates with RAD18 and the SLF1-SLF2 complex at replication-coupled DNA interstrand repair and DNA double-strand breaks (DSBs) sites on chromatin in a ubiquitin-dependent manner (PubMed:25931565). Localizes in interchromatin granule clusters (PubMed:11408570). {ECO:0000250|UniProtKB:Q924W5, ECO:0000269|PubMed:11408570, ECO:0000269|PubMed:17589526, ECO:0000269|PubMed:25931565}

Tissue Location

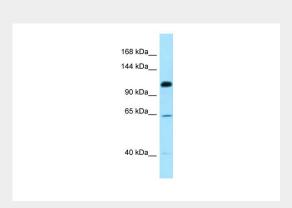
Widely expressed (PubMed:11408570). Strongly expressed in testis (PubMed:11408570).

SMC6 Antibody - C-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SMC6 Antibody - C-terminal region - Images



WB Suggested Anti-SMC6 Antibody Titration: 1.0 µg/ml

Positive Control: MCF7 Whole CellSMC6 is supported by BioGPS gene expression data to be expressed in MCF7

SMC6 Antibody - C-terminal region - References

Taylor E.M., et al. Mol. Biol. Cell 12:1583-1594(2001). Wiemann S., et al. Genome Res. 11:422-435(2001). Ota T., et al. Nat. Genet. 36:40-45(2004).





Bechtel S., et al.BMC Genomics 8:399-399(2007). Hillier L.W., et al.Nature 434:724-731(2005).