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SMC6 Antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI15058

Product Information

Application	WB
Primary Accession	Q96SB8
Other Accession	NM_024624, NP_078900
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine, Yeast
Predicted	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine, Yeast
Host	Rabbit
Clonality	Polyclonal
Calculated MW	126326

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.

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. 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}

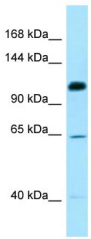
Tissue Location

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

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).

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.