



## Rabbit Anti-phospho-SMC3 (Ser1083) antibody

SL19928R

<b>Product Name:</b>	phospho-SMC3 (Ser1083)
<b>Chinese Name:</b>	磷酸化基底膜相关软骨素蛋白多糖抗体
<b>Alias:</b>	SMC3 (phospho S1083); p-SMC3 (phospho S1083); CDLS2; DKFZp686L19178; DXhXs423e; DXS423E; KIAA0178; MGC138332; OTTHUMP00000061876; RP629D12.1; SB1.8; Segregation of mitotic chromosomes 1; Segregation of mitotic chromosomes like 1; SMC 1; SMC protein 1B; SMC-1-beta; SMC-1B; SMC1; SMC1A; SMC1alpha; SMC1alpha protein; SMC1B; SMC1B_HUMAN; SMC1BETA; SMC1beta protein; SMC1L1; SMC1L2; SMCB; Structural maintenance of chromosome 1 like 1 protein; Structural maintenance of chromosome 1 like 2 protein; Structural maintenance of chromosomes 1A; Structural maintenance of chromosomes 1B; Structural maintenance of chromosomes protein 1B.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	141kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthesised phosphopeptide derived from human SMC3 around the phosphorylation site of Ser1083.:SG(p-S)QS-
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>This gene belongs to the SMC3 subfamily of SMC proteins. The encoded protein occurs in certain cell types as either an intracellular, nuclear protein or a secreted protein. The nuclear form, known as structural maintenance of chromosomes 3, is a component of the multimeric cohesin complex that holds together sister chromatids during mitosis, enabling proper chromosome segregation. Post-translational modification of the encoded protein by the addition of chondroitin sulfate chains gives rise to the secreted proteoglycan bamacan, an abundant basement membrane protein. [provided by RefSeq, Jul 2008]</p> <p><b>Function:</b> Central component of cohesin, a complex required for chromosome cohesion during the cell cycle. The cohesin complex may form a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. Cohesion is coupled to DNA replication and is involved in DNA repair. The cohesin complex plays also an important role in spindle pole assembly during mitosis and in chromosomes movement.</p> <p><b>Subcellular Location:</b> Nucleus. Chromosome. Chromosome &gt; centromere. Associates with chromatin. Before prophase it is scattered along chromosome arms. During prophase, most of cohesin complexes dissociate from chromatin probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. At anaphase, the RAD21 subunit of the cohesin complex is cleaved, leading to the dissociation of the complex from chromosomes, allowing chromosome separation.</p> <p><b>Post-translational modifications:</b> Phosphorylated upon DNA damage, probably by ATM or ATR. Acetylation at Lys-105 and Lys-106 by ESCO1 is important for genome stability and S phase sister chromatid cohesion. Regulated by DSCC1, it is required for processive DNA synthesis, coupling sister chromatid cohesion establishment during S phase to DNA replication.</p> <p><b>DISEASE:</b> Defects in SMC3 are the cause of Cornelia de Lange syndrome type 3 (CDLS3) [MIM:610759]. CDLS is a dominantly inherited multisystem developmental disorder characterized by growth and cognitive retardation, abnormalities of the upper limbs, gastroesophageal dysfunction, cardiac, ophthalmologic and genitourinary anomalies, hirsutism, and characteristic facial features. CDSL3 is a mild form with absence of major structural anomalies typically associated with CDLS. The phenotype in some instances approaches that of apparently non-syndromic mental retardation.</p> <p><b>Similarity:</b> Belongs to the SMC family. SMC3 subfamily.</p>

**SWISS:**  
Q9UQE7

**Gene ID:**  
9126

**Database links:**

[Entrez Gene: 395188](#) Chicken

[Entrez Gene: 281729](#) Cow

[Entrez Gene: 9126](#) Human

[Entrez Gene: 13006](#) Mouse

[Entrez Gene: 29486](#) Rat

[Entrez Gene: 399092](#) Xenopus laevis

[Entrez Gene: 324475](#) Zebrafish

[Omim: 606062](#) Human

[SwissProt: Q9UQE7](#) Human

[SwissProt: Q9CW03](#) Mouse

[SwissProt: P97690](#) Rat

[SwissProt: O93309](#) Xenopus laevis

[Unigene: 24485](#) Human

[Unigene: 14910](#) Mouse

[Unigene: 11074](#) Rat

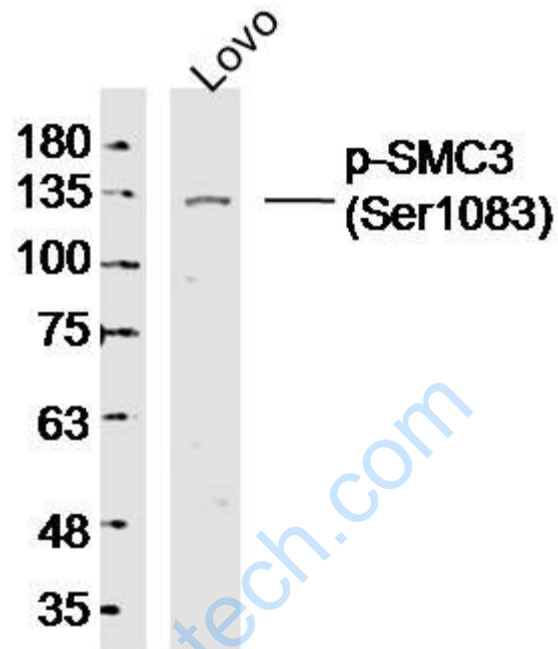
[Unigene: 290](#) Xenopus laevis

[Unigene: 75355](#) Xenopus laevis

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample: LOVO Cell (Human) Lysate at 40 ug

Primary: Anti-p-SMC3(Ser1083) (SL19928R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 141 kD

Observed band size: 135 kD