

# Human SMC1B (SMC1L2) knockout HeLa cell lysate ab258689

## 2 图像

### 概述

产品名称	人SMC1B (SMC1L2) knockout HeLa cell裂解物
产品概述	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HeLa
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp insertion in exon9 and 7 bp deletion in exon9.
Passage number	<20
Knockout validation	Sanger Sequencing
Reconstitution notes	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT.

*\*Usage of SDS sample buffer is not recommended with these lyophilized lysates.*

### 说明

**Lysate preparation:** Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

**User storage instructions:** Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

**[See here for more information on knockout cell lysates.](#)**

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### 性能

**存放说明**

Store at -80°C. Please refer to protocols.

组件	1 kit
ab262493 - Human SMC1B knockout HeLa cell lysate	1 x 100µg
ab255929 - Human wild-type HeLa cell lysate	1 x 100µg

**Cell type**

epithelial

**Disease**

Adenocarcinoma

**Gender**

Female

**STR Analysis**

Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18 TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

**靶标****功能**

Meiosis-specific component of cohesin complex. Required for the maintenance of meiotic cohesion, but not, or only to a minor extent, for its establishment. Contributes to axial element (AE) formation and the organization of chromatin loops along the AE. Plays a key role in synapsis, recombination and chromosome movements. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms 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. The meiosis-specific cohesin complex probably replaces mitosis specific cohesin complex when it dissociates from chromatin during prophase I.

**序列相似性**

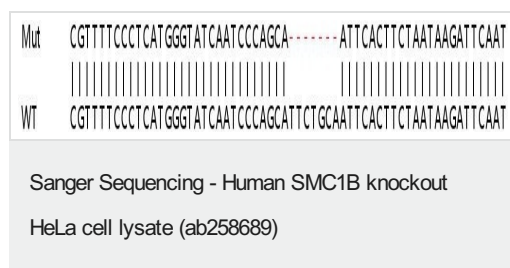
Belongs to the SMC family. SMC1 subfamily.

**结构域**

The flexible hinge domain, which separates the large intramolecular coiled coil regions, allows the heterotypic interaction with the corresponding domain of SMC3, forming a V-shaped heterodimer. The two heads of the heterodimer are then connected by different ends of the cleavable RAD21 or REC8 protein, forming a ring structure.

**细胞定位**

Nucleus. Chromosome. Chromosome > centromere. Associates with chromatin. In prophase I stage of meiosis, localizes along the AE of synaptonemal complexes. In late-pachytene-diplotene, the bulk of protein dissociates from the chromosome arms probably because of phosphorylation by PLK, except at centromeres, where cohesin complexes remain. Remains chromatin associated at the centromeres up to metaphase II. At anaphase II, dissociates from centromeres, allowing chromosomes segregation.

**图片**

Allele-1: 7 bp deletion in exon9

Mut	CGTTTTCCCTCATGGGTATCAATCCCAGCAATTCTGCAATTCACCTTCTAATAAGATTCAA
WT	CGTTTTCCCTCATGGGTATCAATCCCAGCA TTCTGCAATTCACCTTCTAATAAGATTCAA

Sanger Sequencing - Human SMC1B knockout  
HeLa cell lysate (ab258689)

Allele-2: 1 bp insertion in exon9

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