

### Anti-SMC3 antibody ab89618

#### 3 图像

#### 概述

产品名称	Anti-SMC3抗体
描述	小鼠多克隆抗体to SMC3
宿主	Mouse
经测试应用	适用于: WB, ICC/IF
种属反应性	与反应: Human
免疫原	Recombinant full length protein within Human SMC3. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <b><a href="#">contact</a></b> our Scientific Support team to discuss your requirements.
阳性对照	WB: human colon tissue lysate; SMC3 transfected 293T cell lysate ICC/IF: HeLa cell
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.40 Constituent: 100% PBS
纯度	Protein A purified
克隆	多克隆
同种型	IgG

#### 应用

## The Abpromise guarantee

**Abpromise™** 承诺保证使用ab89618于以下的经测试应用

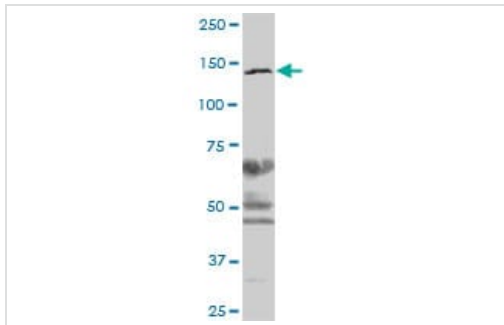
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 142 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

## 靶标

功能	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.
疾病相关	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.
序列相似性	Belongs to the SMC family. SMC3 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 SMC1A or SMC1B, forming a V-shaped heterodimer. The two heads of the heterodimer are then connected by different ends of the cleavable RAD21 protein, forming a ring structure.
翻译后修饰	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.
细胞定位	Nucleus. Chromosome. Chromosome > 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.

## 图片



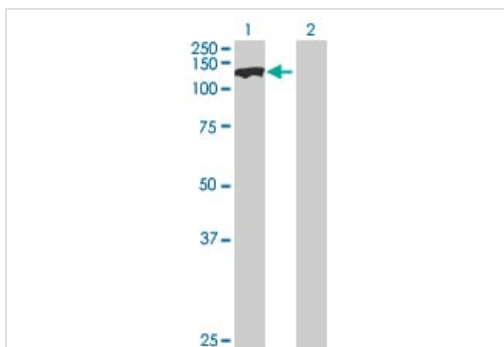
Western blot - Anti-SMC3 antibody (ab89618)

Anti-SMC3 antibody (ab89618) at 1 µg/ml + human colon tissue lysate at 50 µg

**Predicted band size:** 142 kDa

**Observed band size:** 142 kDa

**Additional bands at:** 46 kDa, 50 kDa, 65 kDa. We are unsure as to the identity of these extra bands.



Western blot - Anti-SMC3 antibody (ab89618)

**All lanes :** Anti-SMC3 antibody (ab89618) at 1 µg/ml

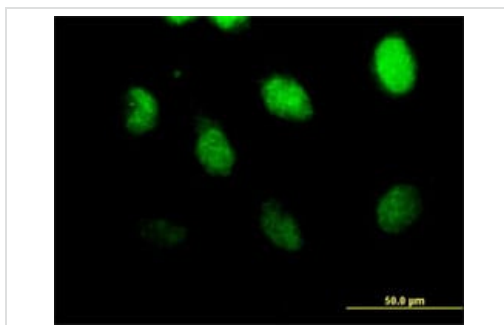
**Lane 1 :** SMC3 transfected 293T cell lysate

**Lane 2 :** non transfected 293T cell lysate

Lysates/proteins at 25 µg per lane.

**Predicted band size:** 142 kDa

**Observed band size:** ~142 kDa



Immunocytochemistry/ Immunofluorescence - Anti-SMC3 antibody (ab89618)

Immunofluorescence analysis of SMC3 in HeLa cell labelled with ab89618 at 10 µg/ml

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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