

Anti-SMC3 antibody [EPR7984] ab128919

重组 RabMAb

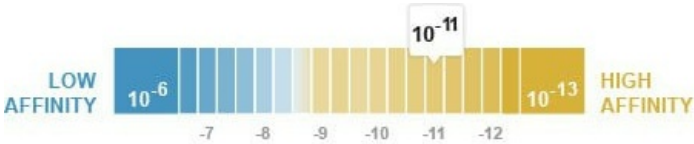
13 References 4 图像

概述

产品名称	Anti-SMC3抗体[EPR7984]
描述	兔单克隆抗体[EPR7984] to SMC3
宿主	Rabbit
经测试应用	适用于: WB, IHC-P 不适用于: IP
种属反应性	与反应: Human 预测可用于: Mouse, Rat ⓘ
免疫原	Synthetic peptide within Human SMC3 aa 1200 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">Q9UQE7</a> (Peptide available as <a href="#">ab209493</a> )
阳性对照	Human colon tissue. HeLa, A431, K562 and HepG2 cell lysates.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information <a href="#">see here</a> . Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a> .

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
解离常数 (K <sub>D</sub> )	K <sub>D</sub> = 3.84 x 10 <sup>-11</sup> M



[Learn more about K<sub>D</sub>](#)

存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
纯度	Tissue culture supernatant
克隆	单克隆
克隆编号	EPR7984
同种型	IgG

应用

**The Abpromise guarantee**      **Abpromise™** 承诺保证使用 ab128919 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		1/1000 - 1/10000. Predicted molecular weight: 141 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

应用说明      Is unsuitable for IP.

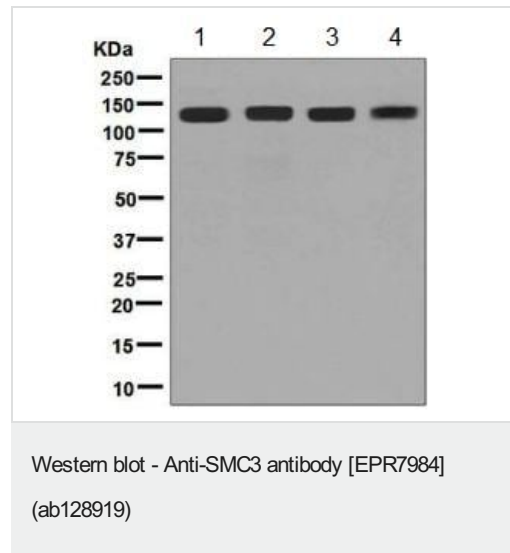
靶标

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. CDLS3 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



**All lanes :** Anti-SMC3 antibody [EPR7984] (ab128919) at 1/1000 dilution

**Lane 1 :** HeLa cell lysate

**Lane 2 :** A431 cell lysate

**Lane 3 :** K562 cell lysate

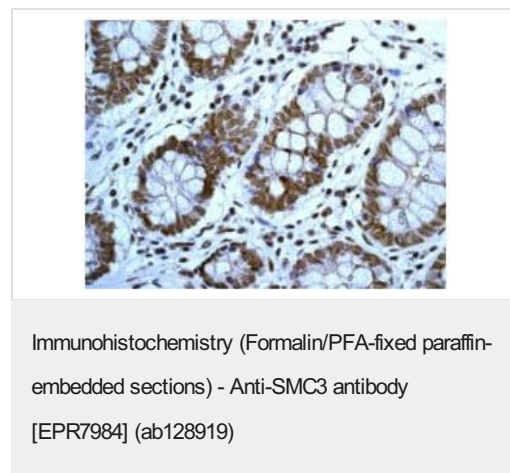
**Lane 4 :** HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

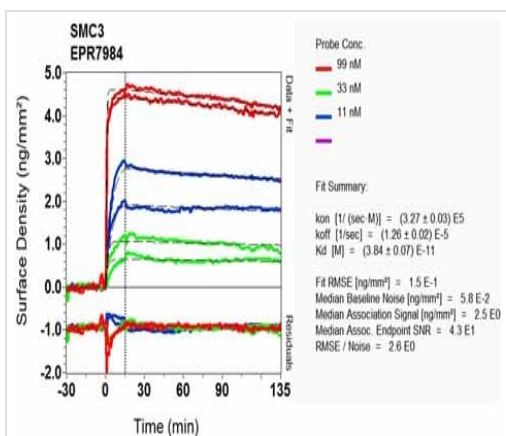
**All lanes :** Goat anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 141 kDa



ab128919 at 1/100 dilution staining SMC3 in paraffin-embedded Human colon tissue by immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



SPR Scanning - Anti-SMC3 antibody [EPR7984]  
(ab128919)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-SMC3 antibody [EPR7984] (ab128919)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

#### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors