abcam

Product datasheet

Anti-SMC3 antibody ab9263

★★★★★ 7 Abreviews 84 References 画像数 4

製品の概要

製品名 Anti-SMC3 antibody

製品の詳細 Rabbit polyclonal to SMC3

由来種 Rabbit

アプリケーション 適用あり: IP, WB, IHC-P 種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat, Rabbit, Horse, Chicken, Guinea pig, Cow, Dog, Turkey, Pig,

Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Platypus 4

免疫原 Synthetic peptide corresponding to Human SMC3 conjugated to keyhole limpet haemocyanin.

Which represents a portion within the last 100 amino acids GenBank PID 4885399.

ポジティブ・コントロール WB: HEK293T, HeLa, Jurkat, LNCaP, U2OS, A-549, TCMK-1, and NIH/3T3 whole cell lysate;

IHC-P: Human breast carcinoma and mouse renal cell carcinoma; IP: Lysate from HEK293T cells.

特記事項
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.

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&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7

Preservative: 0.09% Sodium azide

Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris

精製度 Immunogen affinity purified

特記事項(精製) Antibodies were affinity purified using the peptide immobilized on solid support. Antibody

concentration was determined by extinction coefficient: absorbance at 280 nmof 1.4 equals 1.0

mg of lgG.

アイソタイプ

ΙqG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab9263の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IP	**** <u>(1)</u>	Use at 2-10 μg/mg of lysate.
WB	*****(<u>3</u>)	1/10000 - 1/25000. Detects a band of approximately 140 kDa (predicted molecular weight: 141.5 kDa).
IHC-P		1/1000 - 1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

ターゲット情報

機能

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.

関連疾患

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.

配列類似性

Belongs to the SMC family. SMC3 subfamily.

ドメイン

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.

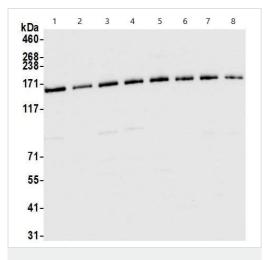
翻訳後修飾

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.

細胞内局在

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.



Western blot - Anti-SMC3 antibody (ab9263)

All lanes: Anti-SMC3 antibody (ab9263) at 0.04 µg/ml

Lane 1 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lane 2: HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 3 : Jurkat (human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 4: LNCaP (human prostate cancer cell line) whole cell lysate

Lane 5 : U-2 OS (human bone osteosarcoma epithelial cell line) whole cell lysate

Lane 6: A549 (human lung carcinoma cell line) whole cell lysate

Lane 7 : TCMK-1 (mouse epithelial cell line from kidney transformed with SV40 viral antigen) whole cell lysate

Lane 8 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

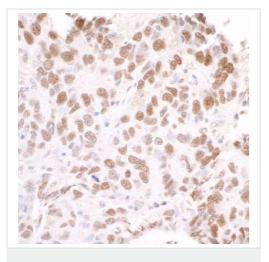
Lysates/proteins at 10 µg per lane.

Predicted band size: 141.5 kDa

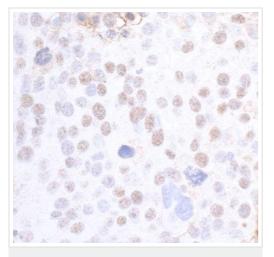
Exposure time: 3 seconds

Lysates prepared using NETN lysis buffer.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labeling SMC3 with ab9263 at 1/5000 dilution. Heat mediated antigen retrieval was performed using citrate buffer pH 6.

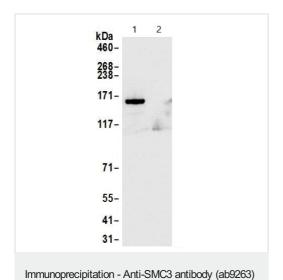


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SMC3 antibody (ab9263)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SMC3 antibody (ab9263)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse renal cell carcinoma tissue labeling SMC3 with ab9263 at 1/5000 dilution. Heat mediated antigen retrieval was performed using citrate buffer pH 6.



Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HEK293T cells prepared using NETN lysis buffer.

Lane 1: ab9263 used for IP at 6 µg per reaction

Lane 2: Control IgG

For blotting immunoprecipitated SMC3, ab9263 was used at 0.04 $\mu g/mL$.

Detection: Chemiluminescence with an exposure time of 3 seconds.

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.co.jp/abpromise or contact our technical team.

Terms and conditions

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