abcam

Product datasheet

Anti-SMC3 antibody ab89618

画像数3

製品の概要

製品名 Anti-SMC3 antibody

製品の詳細 Mouse polyclonal to SMC3

由来種 Mouse

アプリケーション 適用あり: WB, ICC/IF

種交差性 交差種: 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 **contact** our Scientific Support

team to discuss your requirements.

ポジティブ・コントロール WB: human colon tissue lysate; SMC3 transfected 293T cell lysate ICC/IF: HeLa cell

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. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

バッファー pH: 7.40

Constituent: 100% PBS

精製度 Protein A purified

ポリ/モノ ポリクローナル

アイソタイプ lgG

アプリケーション

The Abpromise guarantee

Abpromise保証は、次のテスト済みアプリケーションにおけるab89618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
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 142 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

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

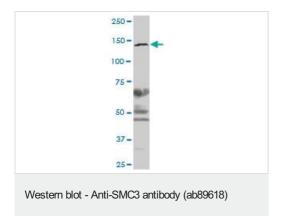
Phosphorylated upon DNA damage, probably by ATM or ATR.

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.

画像

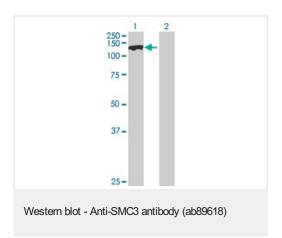


Anti-SMC3 antibody (ab89618) at 1 $\mu g/ml$ + human colon tissue lysate at 50 μg

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.



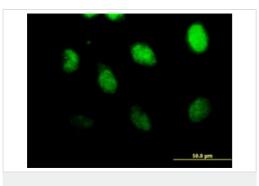
All lanes: Anti-SMC3 antibody (ab89618) at 1 µg/ml

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



Immunofluorescence analysis of SMC3 in HeLa cell labelled with ab89618 at 10 $\mu g/ml$

Immunocytochemistry/ Immunofluorescence - Anti-SMC3 antibody (ab89618)

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

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