

Anti-SMC1A antibody [EP2879Y] ab75819

リコンビナント **RabMAb**

1 References [画像数 3](#)

製品の概要

| | |
|--------------|---|
| 製品名 | Anti-SMC1A antibody [EP2879Y] |
| 製品の詳細 | Rabbit monoclonal [EP2879Y] to SMC1A |
| 由来種 | Rabbit |
| アプリケーション | 適用あり: WB, ICC/IF 適用なし: Flow Cyt, IHC-P or IP |
| 種交差性 | 交差種: Mouse, Human |
| 免疫原 | Synthetic peptide within Human SMC1A (C terminal). The exact sequence is proprietary. |
| ポジティブ・コントロール | HeLa, 293T and NIH3T3 cell lysates; HeLa cells. |
| 特記事項 | This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information. |

製品の特性

| | |
|-------|--|
| 製品の状態 | Liquid |
| 保存方法 | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| バッファー | pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant |
| 精製度 | Tissue culture supernatant |
| ポリ/モノ | モノクローナル |

クローン名 EP2879Y
アイソタイプ IgG

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ab75819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 | | 1/500 - 1/1000. Detects a band of approximately 143 kDa (predicted molecular weight: 143 kDa). |
| ICC/IF | | 1/100 - 1/250. |

追加情報 Is unsuitable for Flow Cyt, IHC-P or IP.

ターゲット情報

機能 Involved in chromosome cohesion during cell cycle and in DNA repair. Central component of cohesin complex. 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 cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

関連疾患 Defects in SMC1A are the cause of Cornelia de Lange syndrome type 2 (CDLS2) [MIM:300590]; also known as Cornelia de Lange syndrome X-linked. CDLS is a clinically heterogeneous developmental disorder associated with malformations affecting multiple systems. CDLS is characterized by facial dysmorphisms, abnormal hands and feet, growth delay, cognitive retardation and various other malformations including gastroesophageal dysfunction and cardiac, ophthalmologic and genitourinary anomalies.

配列類似性 Belongs to the SMC family. SMC1 subfamily.

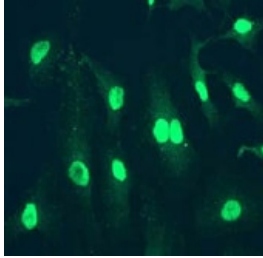
ドメイン The flexible hinge domain, which separates the large intramolecular coiled coil regions, allows the heterotypic interaction with the corresponding domain of SMC3, forming a V-shaped heterodimer. The two heads of the heterodimer are then connected by different ends of the cleavable RAD21 protein,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

翻訳後修飾 Phosphorylated by ATM upon ionizing radiation in a NBS1-dependent manner. Phosphorylated by ATR upon DNA methylation in a MSH2/MSH6-dependent manner. Phosphorylation of Ser-957 and Ser-966 activates it and is required for S-phase checkpoint activation.

細胞内局在 Nucleus. Chromosome. Chromosome > centromere > kinetochore. 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. In germ cells, cohesin complex dissociates from chromatin at prophase I, and may be replaced by a meiosis-specific cohesin complex. The phosphorylated form on Ser-

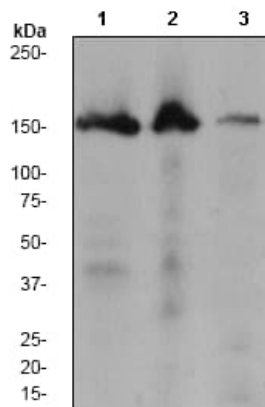
957 and Ser-966 associates with chromatin during G1/S/G2 phases but not during M phase, suggesting that phosphorylation does not regulate cohesin function. Integral component of the functional centromere-kinetochore complex at the kinetochore region during mitosis.

画像



Immunocytochemistry/ Immunofluorescence - Anti-SMC1A antibody [EP2879Y] (ab75819)

ab75819 at 1/100 dilution staining SMC1A in HeLa cells by Immunofluorescence.



Western blot - Anti-SMC1A antibody [EP2879Y] (ab75819)

All lanes : Anti-SMC1A antibody [EP2879Y] (ab75819) at 1/500 dilution

Lane 1 : HeLa cell lysate

Lane 2 : 293T cell lysate

Lane 3 : NIH3T3 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 143 kDa

Observed band size: 143 kDa

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-SMC1A antibody [EP2879Y] (ab75819)

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