abcam

Product datasheet

Anti-CENPE antibody [EPR4543(2)] - BSA and Azide free ab247987



リコンピナント

RabMAb

画像数3

製品の概要

製品名 Anti-CENPE antibody [EPR4543(2)] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR4543(2)] to CENPE - BSA and Azide free

由来種 Rabbit

アプリケーション **適用あり**: WB

適用なし: Flow Cyt,ICC/IF,IHC-P or IP

種交差性 交差種: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

特記事項 ab247987 is the carrier-free version of ab124733.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

1

these 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 +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリ/モノ モノクローナル

クローン名 EPR4543(2)

アイソタイプ lgG

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ab247987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 at an assay dependent concentration. Detects a band of approximately 320 kDa (predicted molecular weight: 316 kDa).

追加情報

Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

ターゲット情報

機能

Essential for the maintenance of chromosomal stability through efficient stabilization of microtubule capture at kinetochores. Plays a key role in the movement of chromosomes toward the metaphase plate during mitosis. Is a slow plus end-directed motor whose activity is essential for metaphase chromosome alignment. Couples chromosome position to microtubule depolymerizing activity. The highly processive microtubule-dependent motor activity of CENPE serves to power chromosome congression and provides a flexible, motile tether linking kinetochores to dynamic spindle microtubules. Necessary for the mitotic checkpoint signal at individual kinetochores to prevent aneuploidy due to single chromosome loss. Required for the efficient recruitment of BUBR1, MAD1 and MAD2 to attached and newly unattached kinetochores. Stimulates mammalian BUBR1 kinase activity. Accumulates just before mitosis at the G2 phase of the cell cycle.

関連疾患

Microcephaly 13, primary, autosomal recessive

配列類似性

Belongs to the TRAFAC class myosin-kinesin ATPase superfamily. Kinesin family.

Contains 1 kinesin motor domain.

ドメイン

The protein is composed of a N-terminal kinesin-motor domain involved in the chromosome movements, a long coil-coiled region involved in the homodimerization and an inhibitory C-tail involved in autoinhibition of the N-terminal catalytic part.

翻訳後修飾

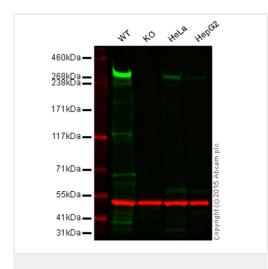
The C-terminal inhibitory domain is phosphorylated. Phosphorylation relieves autoinhibition of the kinetochore motor.

Sumoylated with SUMO2 and SUMO3. The sumoylation mediates the association to the kinetochore.

細胞内局在

Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Associates with kinetochores during congression (as early as prometaphase), relocates to the spindle midzone at anaphase, and is quantitatively discarded at the end of the cell division.

画像



Western blot - Anti-CENPE antibody [EPR4543(2)] - BSA and Azide free (ab247987)

This data was developed using <u>ab124733</u>, the same antibody clone in a different buffer formulation.

Lane 1 Wild-type HAP1 cell lysate (20 µg)

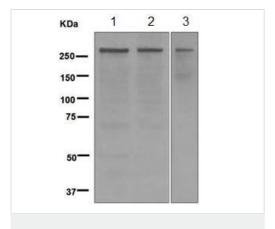
Lane 2 CENPE knockout HAP1 cell lysate (20 µg)

Lane 3 HeLa cell lysate (20 µg)

Lane 4 HepG2 cell lysate (20 µg)

Lanes 1 - 4 Merged signal (red and green). Green - <u>ab124733</u> observed at 310 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab124733 was shown to specifically react with CENPE when CENPE knockout samples were used. Wild-type and CENPE knockout samples were subjected to SDS-PAGE. ab124733 and ab8245 (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-CENPE antibody [EPR4543(2)] - BSA and Azide free (ab247987)

All lanes : Anti-CENPE antibody [EPR4543(2)] (<u>ab124733</u>) at 1/1000 dilution

Lane 1: HepG2 cell lysate

Lane 2 : HeLa cell lysate

Lane 3: Jurkat cell lysate

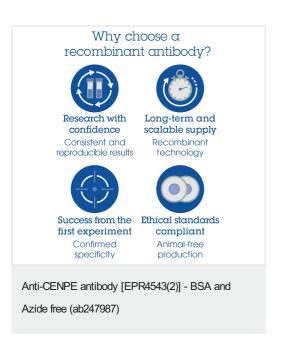
Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 316 kDa

This data was developed using <u>ab124733</u>, the same antibody clone in a different buffer formulation.



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