

### Anti-WSTF antibody [EPR1703] ab109439

KO 評価済 リコンビナント RabMAb

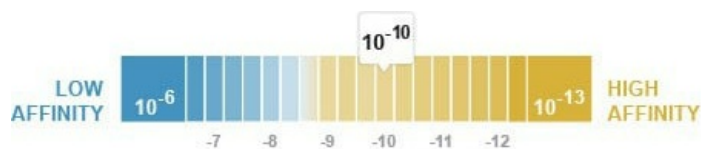
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#### 製品の概要

<b>製品名</b>	Anti-WSTF antibody [EPR1703]
<b>製品の詳細</b>	Rabbit monoclonal [EPR1703] to WSTF
<b>由来種</b>	Rabbit
<b>アプリケーション</b>	<b>適用あり:</b> WB <b>適用なし:</b> ICC/IF, IHC-P or IP
<b>種交差性</b>	<b>交差種:</b> Mouse, Rat, Human
<b>免疫原</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>ポジティブ・コントロール</b>	WB: HAP1, 293T, HeLa, HT-1080, PC-12, and SH-SY5Y cell lysates.
<b>特記事項</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 製品の特性

<b>製品の状態</b>	Liquid
<b>保存方法</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>解離定数 (K<sub>D</sub> 値)</b>	K <sub>D</sub> = 1.23 x 10 <sup>-10</sup> M



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

<b>バッファー</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue
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	culture supernatant
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR1703
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ab109439の使用に適用されず  
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		1/1000 - 1/10000. Detects a band of approximately 185 kDa (predicted molecular weight: 171 kDa).

**追加情報** Is unsuitable for ICC/IF, IHC-P or IP.

## ターゲット情報

<b>機能</b>	Atypical tyrosine-protein kinase that plays a central role in chromatin remodeling and acts as a transcription regulator. Involved in DNA damage response by phosphorylating 'Tyr-142' of histone H2AX (H2AXY142ph). H2AXY142ph plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress. Essential component of the WICH complex, a chromatin remodeling complex that mobilizes nucleosomes and reconfigures irregular chromatin to a regular nucleosomal array structure. The WICH complex regulates the transcription of various genes, has a role in RNA polymerase I and RNA polymerase III transcription, mediates the histone H2AX phosphorylation at 'Tyr-142', and is involved in the maintenance of chromatin structures during DNA replication processes. In the complex, it mediates the recruitment of the WICH complex to replication foci during DNA replication. Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. In the WINAC complex, plays an essential role by targeting the complex to acetylated histones, an essential step for VDR-promoter association.
<b>組織特異性</b>	Ubiquitously expressed with high levels of expression in heart, brain, placenta, skeletal muscle and ovary.
<b>関連疾患</b>	Note=BAZ1B is located in the Williams-Beuren syndrome (WBS) critical region. WBS results from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-copy repeat sequences flanking the deleted region. Haploinsufficiency of BAZ1B may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in the disease.
<b>配列類似性</b>	Belongs to the WAL family, BAZ1B subfamily. Contains 1 bromo domain. Contains 1 DDT domain. Contains 1 PHD-type zinc finger. Contains 1 WAC domain.

## 発生段階

Expressed at equal levels in 19-23 weeks old fetal tissues.

## ドメイン

The N-terminal part (1-345), including the WAC domain and the C motif, mediates the tyrosine-protein kinase activity.

The bromo domain mediates the specific interaction with acetylated histones.

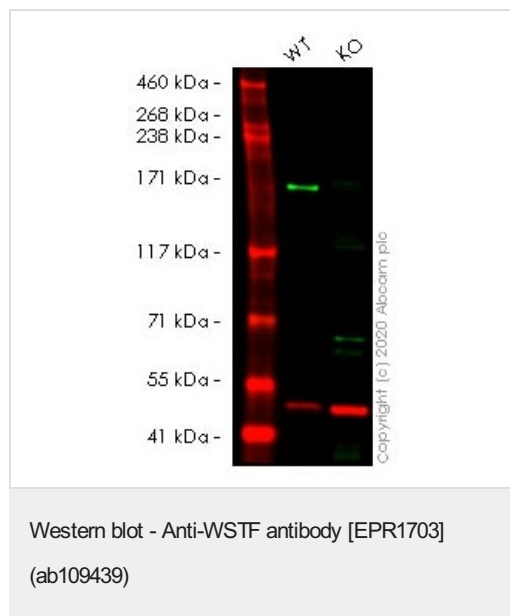
## 翻訳後修飾

Phosphorylated upon DNA damage, probably by ATM or ATR.

## 細胞内局在

Nucleus. Accumulates in pericentromeric heterochromatin during replication. Targeted to replication foci throughout S phase via its association with PCNA.

## 画像



**All lanes :** Anti-WSTF antibody [EPR1703] (ab109439) at 1/1000 dilution

**Lane 1 :** Wild-type HeLa cell lysate

**Lane 2 :** WSTF knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

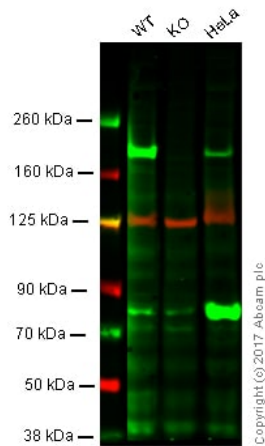
Performed under reducing conditions.

**Predicted band size:** 171 kDa

**Observed band size:** 171 kDa

**Lanes 1- 2:** Merged signal (red and green). Green - ab109439 observed at 171 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) observed at 50 kDa.

ab109439 was shown to react with WSTF in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line [ab264907](#) (knockout cell lysate [ab257370](#)) was used. Wild-type HeLa and WSTF knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab109439 and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-WSTF antibody [EPR1703] (ab109439)

**All lanes :** Anti-WSTF antibody [EPR1703] (ab109439) at 1/1000 dilution

**Lane 1 :** Wild type HAP1 whole cell lysate

**Lane 2 :** BAZ1B knockout HAP1 whole cell lysate

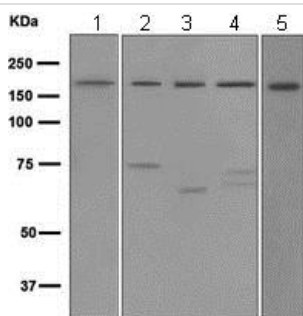
**Lane 3 :** HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 171 kDa

**Lanes 1 - 3:** Merged signal (red and green). Green - ab109439 observed at 171 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

Ab109439 was shown to recognize BAZ1B in wild-type cells along with additional cross-reactive bands as signal was lost in BAZ1B knockout samples. Wild-type and BAZ1B knockout samples were subjected to SDS-PAGE. Ab109439 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-WSTF antibody [EPR1703] (ab109439)

**All lanes :** Anti-WSTF antibody [EPR1703] (ab109439) at 1/1000 dilution

**Lane 1 :** 293T cell lysates

**Lane 2 :** HeLa cell lysates

**Lane 3 :** HT-1080 cell lysates

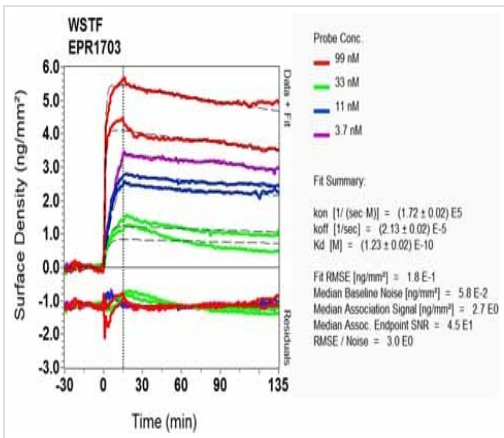
**Lane 4 :** PC-12 cell lysates

**Lane 5 :** SH-SY5Y cell lysates

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 171 kDa

**Observed band size:** 185 kDa



Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

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

OI-RD Scanning - Anti-WSTF antibody [EPR1703]

(ab109439)

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-WSTF antibody [EPR1703] (ab109439)

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

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