

### Anti-SMYD3 antibody [EPR11107(2)] ab187149

KO 評価済 リコンビナント RabMAb

13 References 画像数 9

#### 製品の概要

製品名	Anti-SMYD3 antibody [EPR11107(2)]
製品の詳細	Rabbit monoclonal [EPR11107(2)] to SMYD3
由来種	Rabbit
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: Wild-type HAP1, MCF7, HeLa, HEK-293, T47-D and NIH/3T3 cell lysates; Mouse brain and Rat spleen tissue lysates. IHC-P: Human colonic carcinoma and mouse skeletal muscle tissues. ICC/IF: MCF7 and HeLa cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p>

#### 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 long term. Avoid freeze / thaw cycle.
バッファー	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR11107(2)

## アプリケーション

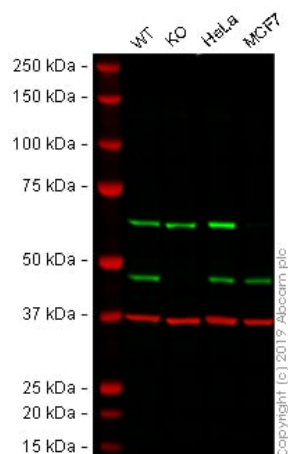
The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab187149の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/30. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/20000. Detects a band of approximately 45 kDa (predicted molecular weight: 49 kDa).
IHC-P		1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF		1/250.
IP		1/40 - 1/60.

## ターゲット情報

機能	Histone methyltransferase. Specifically methylates 'Lys-4' of histone H3, inducing di- and tri-methylation, but not monomethylation. Plays an important role in transcriptional activation as a member of an RNA polymerase complex. Binds DNA containing 5'-CCCTCC-3' or 5'-GAGGGG-3' sequences.
組織特異性	Expressed in skeletal muscles and testis. Overexpressed in a majority of colorectal and hepatocellular carcinomas.
配列類似性	Belongs to the histone-lysine methyltransferase family. Contains 1 MYND-type zinc finger. Contains 1 SET domain.
細胞内局在	Cytoplasm. Nucleus. Mainly cytoplasmic when cells are arrested at G0/G1. Accumulates in the nucleus at S phase and G2/M.

## 画像



Western blot - Anti-SMYD3 antibody [EPR11107(2)]  
(ab187149)

**All lanes :** Anti-SMYD3 antibody [EPR11107(2)] (ab187149) at 1/1000 dilution

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

**Lane 2 :** SMYD3 knockout HAP1 whole cell lysate

**Lane 3 :** HeLa whole cell lysate

**Lane 4 :** MCF7 whole cell lysate

Lysates/proteins at 20 µg per lane.

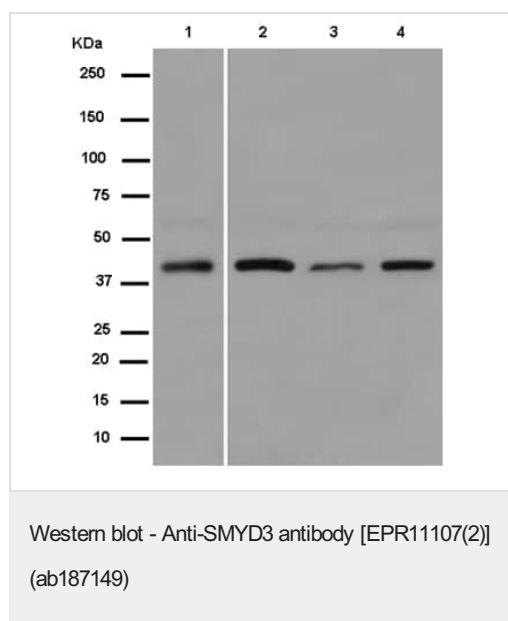
Performed under reducing conditions.

**Predicted band size:** 49 kDa

**Observed band size:** 49 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab187149 observed at 49 kDa. Red - loading control, [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

ab187149 was shown to react with SMYD3 in HAP1 wild-type cells in Western blot. Loss of signal was observed when SMYD3 knockout sample was used. HAP1 wild-type and SMYD3 knockout whole cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% Milk in TBS-T (0.1% Tween®) before incubation with ab187149 and [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) 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) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-SMYD3 antibody [EPR11107(2)] (ab187149) at 1/20000 dilution

**Lane 1 :** MCF7 (human breast adenocarcinoma cell line) cell lysate

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

**Lane 3 :** HEK-293 (human epithelial cell line from embryonic kidney) cell lysate

**Lane 4 :** T47-D (human ductal breast epithelial tumor cell line) cell lysate

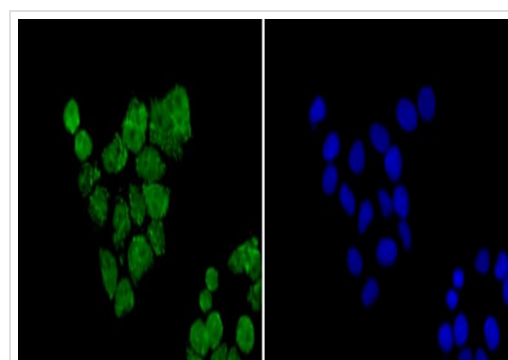
Lysates/proteins at 20 µg per lane.

## Secondary

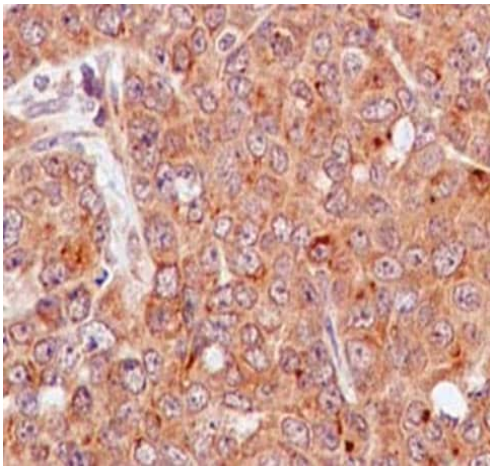
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 49 kDa

Blocking and dilution buffer: 5% NFDM/TBST



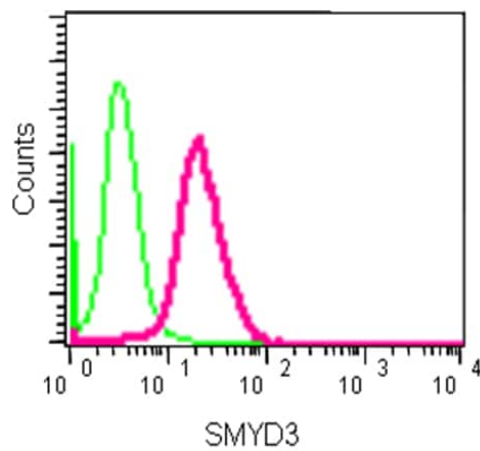
Immunofluorescent analysis of 4% paraformaldehyde-fixed MCF7 (human breast adenocarcinoma cell line) cells, labeling SMYD3 with ab187149 at 1/250 dilution (left image; green); secondary antibody was Goat anti rabbit IgG Alexa Fluor®488, and counterstained with Dapi (right image; blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMYD3 antibody [EPR11107(2)] (ab187149)

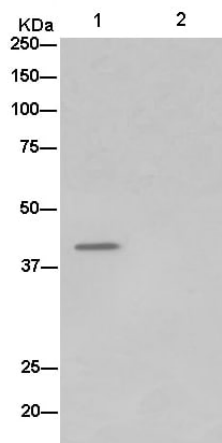
Immunohistochemical analysis of paraffin-embedded human colonic carcinoma tissue, labeling SMYD3 with ab187149 at 1/100 dilution. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

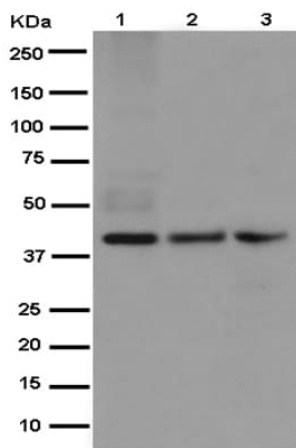


Flow Cytometry (Intracellular) - Anti-SMYD3 antibody [EPR11107(2)] (ab187149)

Intracellular flow cytometric analysis of 2%paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells, labeling SMYD3 with ab187149 at 1/30 dilution. Secondary antibody wasGoat anti rabbit IgG (FITC) at 1/150 dilution. Isotype control was a Rabbit monoclonal IgG.



Immunoprecipitation - Anti-SMYD3 antibody  
[EPR11107(2)] (ab187149)



Western blot - Anti-SMYD3 antibody [EPR11107(2)]  
(ab187149)

Immunoprecipitation analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate labeling SMYD3 using ab187149 at 1/50 dilution (Lane 1). A Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500 was used as secondary antibody. Lane 2: PBS instead of HeLa lysate.

**All lanes :** Anti-SMYD3 antibody [EPR11107(2)] (ab187149) at 1/5000 dilution

**Lane 1 :** Mouse brain tissue lysate

**Lane 2 :** Rat spleen tissue lysate

**Lane 3 :** NIH/3T3 cell lysate

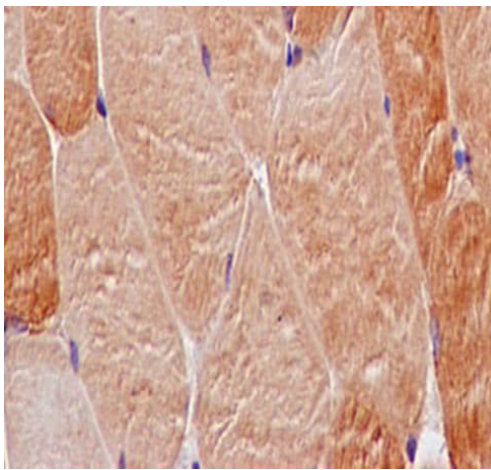
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 49 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue, labeling SMYD3 with ab187149 at 1/100 dilution. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SMYD3 antibody [EPR11107(2)] (ab187149)

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-SMYD3 antibody [EPR11107(2)] (ab187149)

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