# abcam

## Product datasheet

# Anti-SET7 antibody [s4E5] ab14820

★★★★☆ 1 Abreviews 15 References 7 图像

概述

产品名称 Anti-SET7抗体[s4E5]

**小**鼠单克隆抗体[s4E5] to SET7

**宿主** Mouse

特异性 This antibody has been tested against recombinant SET7 but has not been tested against the

endogenous protein yet.

经测试应用 适用于: WB, ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: Mouse, Human, Recombinant fragment

免疫原 Recombinant full length protein corresponding to Human SET7.

**阳性**对照 WB: Recombinant SET7, SET7/9 transfected 293T cell lysate. ICC/IF: HeLa cells. Flow Cyt (Intra):

Jurkat cells; HeLa Cells.

常规说明 This product was changed from ascites to tissue culture supernatant on 24/01/2019. Please note

that the dilutions may need to be adjusted accordingly. If you have any questions, please do not

hesitate to contact our scientific support team.

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 10% Glycerol

纯**度** Tissue culture supernatant

**纯化说明** Purified from TCS.

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 克隆
 单克隆

 克隆编号
 s4E5

 骨髓瘤
 Sp2/0

 同种型
 lgG2b

 轻链类型
 kappa

#### 应用

#### The Abpromise quarantee Abpromise™承诺保证使用ab14820于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/250 - 1/2000. Predicted molecular weight: 50 kDa.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use 1µg for 10 <sup>6</sup> cells. <u>ab170192</u> - Mouse monoclonal lgG2b, is suitable for use as an isotype control with this antibody.

#### 靶标

功能 Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3. H3 'Lys-4'

methylation represents a specific tag for epigenetic transcriptional activation. Plays a central role in the transcriptional activation of genes such as collagenase or insulin. Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription. Has also methyltransferase activity toward non-histone proteins such as p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins. Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II. Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation. Also able to

demethylated 'Lys-372' of p53/TP53 in vitro.

组织特异性 Widely expressed. Expressed in pancreatic islets.

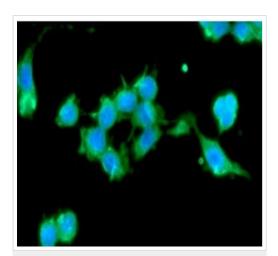
**序列相似性** Belongs to the histone-lysine methyltransferase family. SET7 subfamily.

Contains 3 MORN repeats. Contains 1 SET domain.

结**构域** The SET domain is necessary but not sufficient for histone methyltransferase activity.

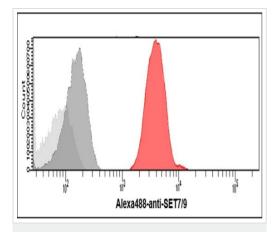
细**胞定位** Nucleus. Chromosome.

#### 图片



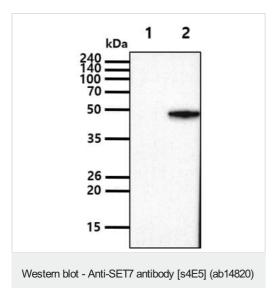
Immunocytochemistry/ Immunofluorescence - Anti-SET7 antibody [s4E5] (ab14820)

Immunocytochemistry/ Immunofluorescence analysis of SET7/9 in HeLa cells. The cell was stained with ab14820 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



Flow Cytometry (Intracellular) - Anti-SET7 antibody [s4E5] (ab14820)

Flow cytometry analysis of SET7/9 in Jurkat cells. The cell was stained with ab14820 at 2-5 $\mu$ g for 1x10<sup>6</sup> cells (red). A Goat anti mouse lgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal lgG was used as the isotype control (blue), cells without incubation with primary and secondary antibody was used as the negative control (black).



All lanes: Anti-SET7 antibody [s4E5] (ab14820) at 1/2000 dilution

Lane 1: 293T cell lysate

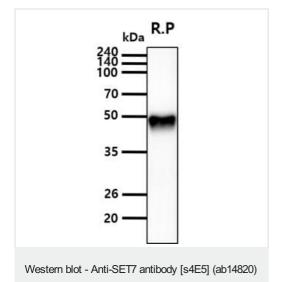
Lane 2: SET7/9 transfected 293T cell lysate

Lysates/proteins at 5 µg per lane.

**Secondary** 

All lanes: goat anti-mouse secondary antibody conjugated to HRP

Predicted band size: 50 kDa

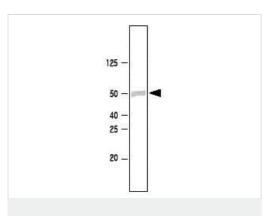


Anti-SET7 antibody [s4E5] (ab14820) at 1/1000 dilution + Recombinant human SET7/9 protein

#### Secondary

Goat anti-mouse secondary antibody conjugated to HRP

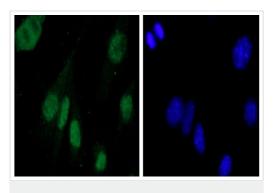
Predicted band size: 50 kDa



Western blot - Anti-SET7 antibody [s4E5] (ab14820)

Western blot analysis of recombinant SET7 using ab14820 at 1/1000. Proteins were visualised using a goat anti-mouse secondary antibody conjugated to HRP and a DAB detection system. Western blot analysis of recombinant SET7 using ab14820 at 1/1000. Proteins were visualised using a goat anti-mouse secondary antibody conjugated to HRP and a DAB detection system.

This image was produced using the ascites version of this antibody.



Immunocytochemistry/ Immunofluorescence - Anti-SET7 antibody [s4E5] (ab14820)

This image is courtesy of Katia Ancelin

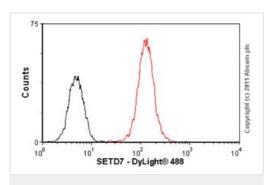
Immunoflouresence was carried out using mouse cells in culture.

Conditions: 4% PFA fixation and dilution with 0.5% triton, 10mg/ml

BSA in PBS. Dilution of ab14820 used: 1/50. Green = ab14820

detected with secondary antibody (Alexa 488). Blue = DAPI stain.

This image was produced using the ascites version of this antibody.



Flow Cytometry (Intracellular) - Anti-SET7 antibody [s4E5] (ab14820)

Overlay histogram showing HeLa cells stained with ab14820 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab14820, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2b [PLPV219] (ab91366, 2µg/1x10<sup>6</sup> cells ) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

This image was produced using the ascites version of this antibody.

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