# abcam

## Product datasheet

## Anti-KAT13D / CLOCK antibody ab3517

★★★★★ <u>5 Abreviews</u> <u>49 References</u> 7 图像

概述

产品名称 Anti-KAT13D / CLOCK抗体

描述 兔多克隆抗体to KAT13D / CLOCK

**宿主** Rabbit

经测试应用 适用于: IHC-P, ICC/IF, IHC-Fr, WB, ChIP

种属反应性 与反应: Mouse, Human

免疫原 Synthetic peptide corresponding to Mouse KAT13D/ CLOCK aa 1-100.

■ Run BLAST with EXPASY ■ Run BLAST with S NCBI

**阳性**对照 WB: human HeLa, mouse NIH-3T3 and skeletal muscle tissue; IHC: human skeletal muscle, colon

tissue, mouse colon tissue; ICC: human U251 cells

常规说明

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 or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

纯**度** Immunogen affinity purified

**克隆** 多克隆

同种型 lgG

应用

## The Abpromise guarantee

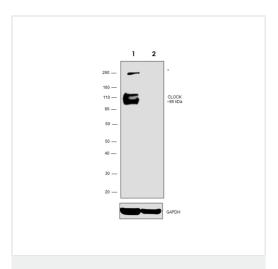
图片

### Abpromise™承诺保证使用ab3517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
IHC-P	<b>★★★★ (1)</b>	1/100 - 1/1000. Immunohistochemical staining of CLOCK in hamster brain results in the staining of the superchiasmatic nucleus.
ICC/IF	<b>★★★★</b> ☆ <u>(1)</u>	1/10 - 1/200.
EMSA		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
Gel Shift Assay		Use at an assay dependent concentration.
WB	<b>★★★★ (3)</b>	1/200 - 1/2000. Detects a band of approximately 100 kDa (predicted molecular weight: 95 kDa).
ChIP		Use at an assay dependent concentration. PubMed: 20956306

靶标		
功能	ARNTL/2-CLOCK heterodimers activate E-box element (3'-CACGTG-5') transcription of a number of proteins of the circadian clock. Activates transcription of PER1 and PER2. This transcription is inhibited in a feedback loop by PER and CRY proteins. Has intrinsic histone acetyltransferase activity and this enzymatic function contributes to chromatin-remodeling events implicated in circadian control of gene expression (By similarity). Acetylates primarily histones H3 and H4 (By similarity). Acetylates also a non-histone substrate: ARNTL.	
组织 <b>特异性</b>	Expressed in all tissues examined including spleen, thymus, prostate, testis, ovary, small intestine, colon, leukocytes, heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas. Highest levels in testis and skeletal muscle. Low levels in thymus, lung and liver. Expressed in all brain regions with highest levels in cerebellum. Highly expressed in the suprachiasmatic nucleus (SCN).	
序列相似性	Contains 1 basic helix-loop-helix (bHLH) domain.  Contains 1 PAC (PAS-associated C-terminal) domain.  Contains 2 PAS (PER-ARNT-SIM) domains.	
翻译后修饰	Phosphorylation is dependent on CLOCK-ARNTL heterodimer formation.	
细胞定位	Cytoplasm. Nucleus. Shuffling between the cytoplasm and the nucleus is under circadian regulation and is ARNTL-dependent. Phosphorylated form located in the nucleus.	



Western blot - Anti-KAT13D / CLOCK antibody (ab3517)

**All lanes :** Anti-KAT13D / CLOCK antibody (ab3517) at 1/2000 dilution

Lane 1: Mouse skeletal muscle tissue

Lane 2: Mouse liver tissue

Lysates/proteins at 30 µg per lane.

#### Secondary

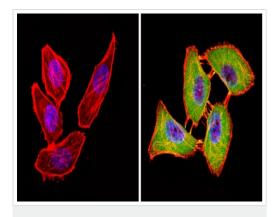
**Lane 1**: Goat anti-Rabbit lgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP at 1/4000 dilution

**Lane 2 :** oat anti-Rabbit lgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP at 1/4000 dilution

Developed using the ECL technique.

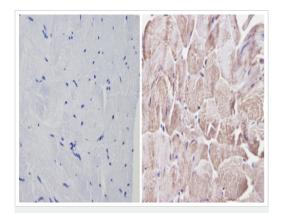
Predicted band size: 95 kDa

Electrophoresis performed on a 4-12% BisTris gel and proteins transferred onto a nitrocellulose membrane.



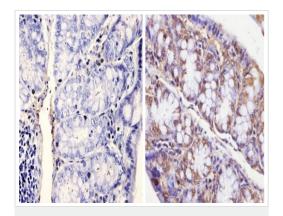
Immunocytochemistry/ Immunofluorescence - Anti-KAT13D / CLOCK antibody (ab3517)

Immunocytochemistry/immunofluorescence analysis of U251 cells labeling KAT13D/CLOCK (green) with ab3517 at 1/100. Cells were fixed with formalin and permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blooked with £% BSA in PBS for 30 minutes at room temperature. Cells were incubated with the primary antibody overnight at 4°C. A DyLight-conjugated secondary antibody was used. F-actin (red) was stained with phalloidin and nuclei (blue) were stained with Hoechst or DAPI. 60X magnification. Left - negative control.



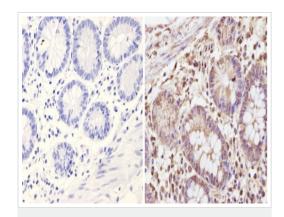
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KAT13D / CLOCK antibody (ab3517)

ab3517 labelling KAT13D in the nucleus and cytoplasm of Human skeletal muscle tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature. Thissue sections were incubated with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit IgG was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



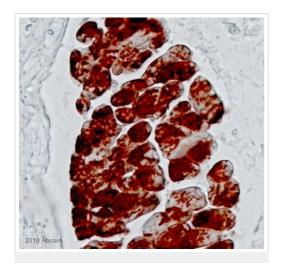
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KAT13D / CLOCK antibody (ab3517)

ab3517 labelling KAT13D in the nucleus and cytoplasm of Mouse colon tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature. Thissue sections were incubated with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit IgG was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KAT13D / CLOCK antibody (ab3517)

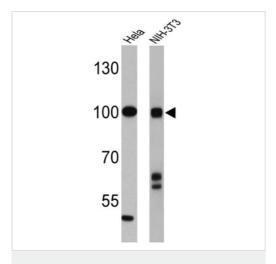
ab3517 labelling KAT13D in the nucleus and cytoplasm of Human colon tissue (right) compared with a negative control (left) by Immunohistochemistry (formalin/PFA-fixed paraffin-embedded sections). To expose target proteins, antigen retrieval method was performed using 10mM sodium citrate (pH 6.0) microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature. Thissue sections were incubated with the primary antibody (1:200 in 3% BSA-PBS) overnight at 4°C. A HRP-conjugated anti-rabbit lgG was used as the secondary antibody, followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KAT13D / CLOCK antibody (ab3517)

This image is courtesy of an anonymous Abreview

ab3517 staining KAT13D/CLOCK in Mouse skeletal muscle tissue sections by IHC-P (Paraformaldehyde-fixed, paraffin-embedded tissue sections). Tissue was fixed with paraformaldehyde and blocked with 10% serum for 1 hour at 20°C; antigen retrieval was by heat mediation in citrate buffer pH6. Samples were incubated with primary antibody (1/400 in PBS) for 12 hours at 4°C. Undiluted ab64256 was used as the secondary antibody.



Western blot - Anti-KAT13D / CLOCK antibody (ab3517)

**All lanes :** Anti-KAT13D / CLOCK antibody (ab3517) at 1/4000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : NIH-3T3 cell lysate

Lysates/proteins at 25 µg per lane.

**Predicted band size:** 95 kDa **Observed band size:** 100 kDa

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

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