abcam

Product datasheet

Anti-KAT13D / CLOCK antibody ab178525

1 Image

Overview

Product name	Anti-KAT13D / CLOCK antibody
Description	Goat polyclonal to KAT13D / CLOCK
Host species	Goat
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Mouse, Rat **Predicted to work with:** Chicken, Human, Orangutan
Immunogen	Synthetic peptide corresponding to Human KAT13D/ CLOCK aa 458-472 (internal sequence) (Cysteine residue). (NP_004889.1) Sequence: DTSTPPRQHLPAHEK Database link: **O15516** Run BLAST with Run BLAST with
Positive control	Mouse and rat skeletal lysate
General notes	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

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 99% Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified

Purification notes	ab178525 is purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab178525 in the following tested applications.

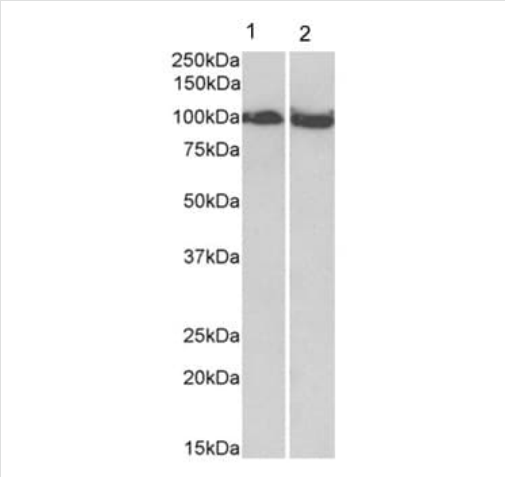
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 0.03 - 0.1 µg/ml. Predicted molecular weight: 95 kDa. 1 hour primary incubation is recommended for this product.

Target

Function	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.
Tissue specificity	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).
Sequence similarities	Contains 1 basic helix-loop-helix (bHLH) domain. Contains 1 PAC (PAS-associated C-terminal) domain. Contains 2 PAS (PER-ARNT-SIM) domains.
Post-translational modifications	Phosphorylation is dependent on CLOCK-ARNTL heterodimer formation.
Cellular localization	Cytoplasm. Nucleus. Shuffling between the cytoplasm and the nucleus is under circadian regulation and is ARNTL-dependent. Phosphorylated form located in the nucleus.

Images



Western blot - Anti-KAT13D / CLOCK antibody (ab178525)

All lanes : Anti-KAT13D / CLOCK antibody (ab178525) at 0.03 µg/ml

Lane 1 : Mouse skeletal muscle lysate
Lane 2 : Rat skeletal muscle lysate

Lysates/proteins at 35 µg per lane.

Developed using the ECL technique.

Predicted band size: 95 kDa

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors