Anti-KAT7 / Hbo1 / MYST2 antibody [EPR18473]

**Product name**
Anti-KAT7 / Hbo1 / MYST2 antibody [EPR18473]

**Description**
Rabbit monoclonal [EPR18473] to KAT7 / Hbo1 / MYST2

**Host species**
Rabbit

**Tested applications**
Suitable for: WB, IHC-P, ICC/IF, IP

**Species reactivity**
Reacts with: Mouse, Rat, Human

**Immunogen**
Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

**Positive control**
WB: HeLa, MCF7, NIH/3T3, Jurkat, C6 and RAW 264.7 cell lysates; human breast cancer lysate. IHC-P: human colon, human testis, mouse colon, rat colon and rat testis tissues. ICC/IF: HEK-293 cells. IP: Jurkat whole cell lysate.

**General notes**
This product is a recombinant monoclonal antibody, which offers several advantages including:
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production
For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

**Properties**

**Form**
Liquid

**Storage instructions**

**Storage buffer**
pH: 7.2
Preservative: 0.01% Sodium azide
Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)

**Purity**
Protein A purified

**Clonality**
Monoclonal
Clone number: EPR18473
Isotype: IgG

**Function**
Component of the HBO1 complex which has a histone H4-specific acetyltransferase activity, a reduced activity toward histone H3 and is responsible for the bulk of histone H4 acetylation in vivo. Through chromatin acetylation it may regulate DNA replication and act as a coactivator of TP53-dependent transcription. Specifically represses AR-mediated transcription.

**Tissue specificity**
Ubiquitously expressed, with highest levels in testis.

**Sequence similarities**
Belongs to the MYST (SAS/MOZ) family. Contains 1 C2HC-type zinc finger.

**Domain**
The C2HC-type zinc finger is required for interaction with MCM2 and ORC1L. The N-terminus is involved in transcriptional repression, while the C-terminus mediates AR-interaction.

**Post-translational modifications**
Phosphorylated upon DNA damage, probably by ATM or ATR.

**Cellular localization**
Nucleus > nucleoplasm.

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**Applications**

**The Abpromise guarantee**
Our Abpromise guarantee covers the use of ab190908 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>WB</td>
<td></td>
<td>1/5000. Detects a band of approximately 75 kDa (predicted molecular weight: 71 kDa).</td>
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<tr>
<td>IHC-P</td>
<td></td>
<td>1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>1/60.</td>
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</tbody>
</table>

**Target**

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**Images**
All lanes: Anti-KAT7 / Hbo1 / MYST2 antibody [EPR18473] (ab190908) at 1/5000 dilution

Lane 1: HeLa (Human epithelial cells from cervix adenocarcinoma) cell lysate
Lane 2: MCF7 (Human breast adenocarcinoma cell line) cell lysate
Lane 3: NIH/3T3 (Mouse embryonic fibroblast cell line) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 71 kDa
Observed band size: 75 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes: Anti-KAT7 / Hbo1 / MYST2 antibody [EPR18473] (ab190908) at 1/5000 dilution

Lane 1: C6 (Rat glial tumor cells) cell lysate
Lane 2: RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 71 kDa
Observed band size: 75 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Anti-KAT7 / Hbo1 / MYST2 antibody [EPR18473] (ab190908) at 1/1000 dilution + human breast cancer lysate at 40 µg

Secondary
Goat Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/50000 dilution

Predicted band size: 71 kDa
Observed band size: 75 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.
Immunohistochemical analysis of paraffin-embedded human testis tissue labeling KAT7 / Hbo1 / MYST2 with ab190908 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on human testis is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling KAT7 / Hbo1 / MYST2 with ab190908 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on mouse colon is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Immunohistochemical analysis of paraffin-embedded rat testis tissue labeling KAT7 / Hbo1 / MYST2 with ab190908 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nuclear staining on rat testis is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HEK-293 (Human epithelial cells from embryonic kidney) cells labeling KAT7 / Hbo1 / MYST2 with ab190908 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Confocal image showing nuclear staining on HEK-293 cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/500 dilution (red).

The negative controls are as follows:
-ve control 1: ab190908 at 1/2000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary at 1/500 dilution.
-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary at 1/500 dilution.
KAT7 / Hbo1 / MYST2 was immunoprecipitated from 1mg of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate with ab190908 at 1/60 dilution. Western blot was performed from the immunoprecipitate using ab190908 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: Jurkat whole cell lysate 10ug (Input).
Lane 2: ab190908 IP in Jurkat whole cell lysate.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab190908 in Jurkat whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 10 seconds.

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

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