Product datasheet

Anti-Histone H1 antibody [AE-4] ab71594

Overview

Product name: Anti-Histone H1 antibody [AE-4]
Description: Mouse monoclonal [AE-4] to Histone H1
Host species: Mouse
Specificity: Histone H1 itself is a highly conserved protein and is practically identical in sequence across most species. Given this, species cross-reactivity may be expected. In blots of rat brain homogenate a duplet is observed at 27-29 kDa consistent with Histone H1. Speckled staining is observed in the nucleus of normal and malignant cells.

Tested applications: Suitable for: IHC-Fr, IHC-P, ELISA, WB, ICC, ICC/IF, Electron Microscopy

Species reactivity: Reacts with: Human

Immunogen: Nuclei from myeloid leukemia biopsy cells.

Positive control: IHC-P: Human normal colon FFPE tissue sections.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: Preservative: 0.09% Sodium azide
Constituent: PBS
Purity: Protein A purified
Clonality: Monoclonal
Clone number: AE-4
Isotype: IgG2a

Applications

Our Abpromise guarantee covers the use of ab71594 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>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-Fr</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ELISA</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★</td>
<td>1/100.</td>
</tr>
<tr>
<td>ICC</td>
<td>★★★★★</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>Electron Microscopy</td>
<td></td>
<td>Use at an assay dependent concentration. PubMed: 21063722</td>
</tr>
</tbody>
</table>

**Function**

May play a key role in the control of gene expression during oogenesis and early embryogenesis, presumably through the perturbation of chromatin structure. Essential for meiotic maturation of germinal vesicle-stage oocytes. The somatic type linker histone H1c is rapidly replaced by H1oo in a donor nucleus transplanted into an oocyte. The greater mobility of H1oo as compared to H1c may contribute to this rapid replacement and increased instability of the embryonic chromatin structure. The rapid replacement of H1c with H1oo may play an important role in nuclear remodeling.

**Tissue specificity**

Oocyte-specific.

**Sequence similarities**

Belongs to the histone H1/H5 family.

Contains 1 H15 (linker histone H1/H5 globular) domain.

**Cellular localization**

IHC image of ab71594 staining Histone H1 in Human normal colon formalin fixed paraffin embedded tissue sections, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab71594, 1/1000 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the negative control (shown on the inset).

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

ab71594 staining Histone H1 in HeLa cells by Immunocytochemistry/Electron Microscopy. Cells were frozen under high pressure. Samples were incubated with ab71594 at 5µg/ml in 1% serum, 1% BSA, PBS. The secondary used was a donkey anti-mouse conjugated to 10nM gold, 1/30 dilution.

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