Product datasheet

Anti-HEXIM1 antibody ab25388

Overview

Product name
Anti-HEXIM1 antibody

Description
Rabbit polyclonal to HEXIM1

Host species
Rabbit

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

Species reactivity
Reacts with: Mouse, Rat, Human

Predicted to work with: Dog

Immunogen
Synthetic peptide conjugated to KLH derived from within residues 300 to the C-terminus of Human HEXIM1. Read Abcam's proprietary immunogen policy (Peptide available as ab26978.)

Positive control
Recombinant Human HEXIM1 protein (ab117163) can be used as a positive control in WB. This antibody gave positive signal in the following, human Whole Cell Lysates: HeLa, Jurkat, A431, HEK293 (Data not shown), MCF7, SHSY-5Y Mouse Whole Cell Lysate: MEF1, NIH 3T3 (Data not shown); Mouse Tissue Lysates (Data not shown): Kidney, Testis, Ovary; Rat Tissue Lysate (Data not shown): Kidney This antibody gave a positive signal in the following Methanol/Formaldehyde fixed cell line: HeLa.

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 or -80°C. Avoid freeze / thaw cycle.

Storage buffer
pH: 7.40
Preservative: 0.02% Sodium azide
Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG
**Function**

Transcriptional regulator which functions as a general RNA polymerase II transcription inhibitor. In cooperation with 7SK snRNA sequesters P-TEFb in a large inactive 7SK snRNP complex preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation. May also regulate NF-kappa-B, ESR1, NR3C1 and CIITA-dependent transcriptional activity.

**Tissue specificity**

Ubiquitously expressed with higher expression in placenta. HEXIM1 and HEXIM2 are differentially expressed. Expressed in endocrine tissues.

**Sequence similarities**

Belongs to the HEXIM family.

**Domain**

The coiled-coil domain mediates oligomerization.

**Cellular localization**

Nucleus. Cytoplasm. Binds alpha-importin and is mostly nuclear.

---

**Applications**

Our [Abpromise guarantee](#) covers the use of ab25388 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>ChIP</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 54 kDa (predicted molecular weight: 41 kDa). Abcam recommends using milk (3%) as the blocking agent.</td>
</tr>
<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 1 µg/ml.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

---

**Target**

**Function**

Transcriptional regulator which functions as a general RNA polymerase II transcription inhibitor. In cooperation with 7SK snRNA sequesters P-TEFb in a large inactive 7SK snRNP complex preventing RNA polymerase II phosphorylation and subsequent transcriptional elongation. May also regulate NF-kappa-B, ESR1, NR3C1 and CIITA-dependent transcriptional activity.

**Tissue specificity**

Ubiquitously expressed with higher expression in placenta. HEXIM1 and HEXIM2 are differentially expressed. Expressed in endocrine tissues.

**Sequence similarities**

Belongs to the HEXIM family.

**Domain**

The coiled-coil domain mediates oligomerization.

**Cellular localization**

Nucleus. Cytoplasm. Binds alpha-importin and is mostly nuclear.

---

**Images**

**All lanes**: Anti-HEXIM1 antibody (ab25388) at 1/250 dilution

**Lane 1**: HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2**: Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3**: A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 4**: MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 5**: SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.
Secondary

**All lanes**: IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

**Predicted band size**: 41 kDa

**Observed band size**: 54 kDa

*why is the actual band size different from the predicted?*

ab25388 recognizes a band at approximately 54 kDa that corresponds in size to that seen for HEXIM1. Although it has a predicted molecular weight of 41 kDa, it has been shown to migrate at a larger size of about 54-60 kDa (see Byers et al., J Biol Chem. 2005 Apr 22;280(16):16360-7 and Schulte et al., J. Biol. Chem., Vol. 280, (26): 24968-24977).

**Immunoprecipitation - Anti-HEXIM1 antibody**

HEXIM1 - ChIP Grade was immunoprecipitated using 0.5mg Jurkat whole cell extract, 5µg of Rabbit polyclonal to HEXIM1 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min. Jurkat whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab25388.


Band: 54kD: HEXIM1.
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HEXIM1 antibody (ab25388)

Image courtesy of Human Protein Atlas

ab25388 staining HEXIM1 in human kidney. Paraffin embedded human kidney tissue was incubated with ab25388 (1/100 dilution) for 30 mins at room temperature. Antigen retrieval was performed by heat induction in citrate buffer pH 6.

ab25388 was tested in a tissue microarray (TMA) containing a wide range of normal and cancer tissues as well as a cell microarray consisting of a range of commonly used, well characterised human cell lines.

Further results for this antibody can be found at www.proteinatlas.org

Immunocytochemistry/ Immunofluorescence - Anti-HEXIM1 antibody (ab25388)

ICC/IF image of ab25388 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab25388 at 1µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

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