**Product datasheet**

**Anti-Aromatase antibody ab18995**

- **Product name**: Anti-Aromatase antibody
- **Description**: Rabbit polyclonal to Aromatase
- **Host species**: Rabbit
- **Specificity**: ab18995 recognises aromatase.
- **Tested applications**: Suitable for: ICC/IF, IHC-Fr, IHC-P, WB
- **Species reactivity**: Reacts with: Mouse, Rat, Human
- **Immunogen**: Synthetic peptide surrounding amino acid 385 of human Aromatase (Peptide available as ab51924.)
- **Positive control**: ICC/IF: HepG2 cells. IHC-P: Human normal placenta.

**Properties**

- **Form**: Liquid
- **Storage instructions**: Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
- **Storage buffer**: Preservative: 0.01% Thimerosal (merthiolate)  
  Constituents: PBS, 30% Glycerol, 0.5% BSA
- **Purity**: Immunogen affinity purified
- **Clonality**: Polyclonal
- **Isotype**: IgG

**Applications**

Our **Abpromise guarantee** covers the use of **ab18995** 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>ICC/IF</td>
<td>★★★★★</td>
<td>Use a concentration of 1 µg/ml.</td>
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<tr>
<td>Application</td>
<td>Abreviews</td>
<td>Notes</td>
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<tr>
<td>IHC-Fr</td>
<td>★★★☆☆☆☆</td>
<td>Use at an assay dependent concentration. PubMed: 19620711</td>
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<tr>
<td>IHC-P</td>
<td>★★★☆☆☆☆</td>
<td>Use a concentration of 10 - 20 µg/ml.</td>
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<tr>
<td>WB</td>
<td>★★★☆☆☆☆</td>
<td>Use a concentration of 0.5 - 4 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 58 kDa). An additional 35 kDa band can also be detected in Jurkat cells (we are unsure of the identity).</td>
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</tbody>
</table>

**Target**

**Function**
Catalyzes the formation of aromatic C18 estrogens from C19 androgens.

**Tissue specificity**
Brain, placenta and gonads.

**Involvement in disease**
Defects in CYP19A1 are a cause of aromatase excess syndrome (AEXS) [MIM:139300]; also known as familial gynecomastia. AEXS is characterized by an estrogen excess due to an increased aromatase activity.
Defects in CYP19A1 are the cause of aromatase deficiency (AROD) [MIM:107910]. AROD is a rare disease in which fetal androgens are not converted into estrogens due to placental aromatase deficiency. Thus, pregnant women exhibit a hirsutism, which spontaneously resolves after post-partum. At birth, female babies present with pseudohermaphroditism due to virilization of extern genital organs. In adult females, manifestations include delay of puberty, breast hypoplasia and primary amenorrhoea with multicystic ovaries.

**Sequence similarities**
Belongs to the cytochrome P450 family.

**Cellular localization**
Membrane.

**Images**

Ab18995 staining Human normal placenta. Staining is localised to cell membrane.
Left panel: with primary antibody at 4 µg/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus, at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer citrate pH6.1 in a DAKO PT Link.Slides were peroxidase blocked in 3% H2O2 in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight).
incubation), and amplification may be required.

ICC/IF image of ab18995 stained HepG2 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 (ab18995, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit 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.

Anti-Aromatase antibody (ab18995) at 1 µg/ml + Human brain normal tissue lysate - membrane extract (ab29456) at 10 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 58 kDa
Observed band size: 58 kDa
Additional bands at: 34 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 1 minute

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

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