**Product datasheet**

**Anti-Aromatase antibody [EPR4534(2)] ab124776**

**Overview**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-Aromatase antibody [EPR4534(2)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR4534(2)] to Aromatase</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: WB, IP</td>
</tr>
<tr>
<td></td>
<td>Unsuitable for: Flow Cyt or ICC/IF</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Rat, Human</td>
</tr>
<tr>
<td></td>
<td>Does not react with: Mouse</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide within Human Aromatase aa 1-100. The exact sequence is proprietary. (Peptide available as ab186919)</td>
</tr>
<tr>
<td>Positive control</td>
<td>WB: Human placenta, human uterus, rat brain tissue lysate and JAR and NIH:OVCAR 3 cell lysates. IP: Rat brain tissue lysate.</td>
</tr>
<tr>
<td>General notes</td>
<td>A trial size is available to purchase for this antibody.</td>
</tr>
<tr>
<td></td>
<td>Our RabMAB® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB® patents.</td>
</tr>
<tr>
<td></td>
<td><strong>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</strong></td>
</tr>
<tr>
<td></td>
<td>This product is a recombinant rabbit monoclonal antibody.</td>
</tr>
</tbody>
</table>

**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.</td>
</tr>
<tr>
<td>Dissociation constant (K_D)</td>
<td>( K_D = 2.30 \times 10^{-12} \text{ M} )</td>
</tr>
</tbody>
</table>
Learn more about K

Storage buffer
- pH: 7.20
- Preservative: 0.01% Sodium azide
- Constituents: 40% Glycerol, 0.05% BSA, PBS

Purity
- Protein A purified

Clonality
- Monoclonal

Clone number
- EPR4534(2)

Isotype
- IgG

Applications

Our Abpromise guarantee covers the use of ab124776 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>
</table>

IP
1/10 - 1/300.

Application notes
- Is unsuitable for Flow Cyt or ICC/IF.

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 external genital organs. In adult females, manifestations include delay of puberty, breast hypoplasia and primary amenorrhea with multicystic ovaries.

Sequence similarities
- Belongs to the cytochrome P450 family.

Cellular localization
- Membrane.

Images
Western blot - Anti-Aromatase antibody [EPR4534(2)] (ab124776) at 1/2000 dilution (purified) + Rat brain tissue lysate at 20 µg

**Secondary**

HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG at 1/5000 dilution

**Predicted band size:** 58 kDa

**Observed band size:** 53 kDa

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

Blocking and dilution buffer: 5% NFDM/TBST

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Western blot - Anti-Aromatase antibody [EPR4534(2)] (ab124776) at 1/2000 dilution (purified) + JAR whole cell lysate at 20 µg

**Secondary**

HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG at 1/5000 dilution

**Predicted band size:** 58 kDa

**Observed band size:** 53 kDa

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

Blocking and dilution buffer: 5% NFDM/TBST
ab124776 (purified) at a dilution of 1/300 immunoprecipitating Aromatase in rat brain tissue lysate.

Lane 1 (input): Rat brain tissue lysate (10µg)
Lane 2 (+): ab124776 + rat brain tissue lysate.
Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab124776 in rat brain tissue lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.
Diluting buffer and concentration: 5% NFDM/TBST.

**All lanes**: Anti-Aromatase antibody [EPR4534(2)] (ab124776) at 1/1000 dilution (unpurified)

**Lane 1**: Human placenta lysate
**Lane 2**: Human uterus lysate
**Lane 3**: JAR cell lysate
**Lane 4**: NIH:OVCAR 3 cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes**: HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size**: 58 kDa
**Observed band size**: 53 kDa why is the actual band size different from the predicted?

Equilibrium disassociation constant (K_D)
Learn more about K_D

Click here to learn more about K_D
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