Product datasheet

Anti-UCP2 antibody ab97931

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Overview

Product name
Anti-UCP2 antibody

Description
Rabbit polyclonal to UCP2

Host species
Rabbit

Tested applications
Suitable for: IHC-P, WB

Species reactivity
Reacts with: Human
Predicted to work with: Mouse, Rat, Hamster, Cat, Dog, Pig, Orangutan

Immunogen
Synthetic peptide corresponding to Human UCP2 aa 250 to the C-terminus conjugated to keyhole limpet haemocyanin.
(Peptide available as ab107707)

Positive control
This antibody gave a positive signal in Human Adipose and Spleen Tissue Lysates and FFPE human lymph node tissue sections.

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
Preservative: 0.02% Sodium Azide
 Constituents: 1% BSA, PBS, pH 7.4

Purity
Immunogen affinity purified

Clonality
Polyclonal

Isotype
IgG

Applications

Our Abpromise guarantee covers the use of ab97931 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
<table>
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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
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<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use at an assay dependent concentration. Detects a band of approximately 30 kDa (predicted molecular weight: 33 kDa).</td>
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**Function**
UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation from ATP synthesis. As a result, energy is dissipated in the form of heat.

**Tissue specificity**
Widely expressed in adult human tissues, including tissues rich in macrophages. Most expressed in white adipose tissue and skeletal muscle.

**Sequence similarities**
Belongs to the mitochondrial carrier family. Contains 3 Solcar repeats.

**Cellular localization**
Mitochondrion inner membrane.

**Images**

![Western blot - Anti-UCP2 antibody (ab97931)](image)

- **All lanes**: Anti-UCP2 antibody (ab97931) at 1 µg/ml
- **Lane 1**: Human adipose normal tissue lysate - total protein (ab28980)
- **Lane 2**: Human spleen tissue lysate - total protein (ab29699)

Lysates/proteins at 10 µg per lane.

**Secondary**

- **All lanes**: 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**: 33 kDa
- **Observed band size**: 30 kDa

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

*Additional bands at*: 100 kDa. We are unsure as to the identity of these extra bands.
Exposure time: 3 minutes

IHC image of ab97931 staining in human lymph node formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. 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 ab97931, 5µg/ml, 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.

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.

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