## Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-ARH antibody [EPR13115] - N-terminal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPR13115] to ARH - N-terminal</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>Species reactivity</td>
<td>Reacts with: Mouse, Rat, Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide within Human ARH aa 1-100. The exact sequence is proprietary. Database link: <a href="http://example.com">Q5SW96</a></td>
</tr>
<tr>
<td>Positive control</td>
<td>Humab fetal liver, K562 and 293T cell lysates. K562 cells; mouse heart and kidney and rat heart and kidney tissue lysates.</td>
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</tbody>
</table>

### General notes

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](http://example.com).

This product is a recombinant rabbit monoclonal antibody.

## Properties

### Form

Liquid

### Storage instructions


### Storage buffer

pH: 7.20  
Preservative: 0.01% Sodium azide  
Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant

### Purity

Tissue culture supernatant

### Clonality

Monoclonal

### Clone number

EPR13115

### Isotype

IgG
Function

Adapter protein (clathrin-associated sorting protein (CLASP)) required for efficient endocytosis of the LDL receptor (LDLR) in polarized cells such as hepatocytes and lymphocytes, but not in non-polarized cells (fibroblasts). May be required for LDL binding and internalization but not for receptor clustering in coated pits. May facilitate the endocytosis of LDLR and LDLR-LDL complexes from coated pits by stabilizing the interaction between the receptor and the structural components of the pits. May also be involved in the internalization of other LDLR family members. Binds to phosphoinositides, which regulate clathrin bud assembly at the cell surface.

Tissue specificity

Expressed at high levels in the kidney, liver, and placenta, with lower levels detectable in brain, heart, muscle, colon, spleen, intestine, lung, and leukocytes.

Involvement in disease

Defects in LDLRAP1 are the cause of autosomal recessive hypercholesterolemia (ARH) [MIM:603813]. ARH is a disorder caused by defective internalization of LDL receptors (LDLR) in the liver. ARH has the clinical features of familial hypercholesterolemia (FH) [MIM:143890] homozygotes, including severely elevated plasma LDL cholesterol, tuberous and tendon xanthomata, and premature atherosclerosis. LDL receptor (LDLR) activity measured in skin fibroblasts is normal, as the LDL binding ability.

Sequence similarities

Contains 1 PID domain.

Domain

The [DE]-X(1,2)-F-X-X-[FL]-X-X-X-R motif mediates interaction the AP-2 complex subunit AP2B1.

Post-translational modifications

Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

Cytoplasm.

Applications

Our Abpromise guarantee covers the use of ab181043 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>
<tbody>
<tr>
<td>WB</td>
<td>★★★★★</td>
<td>1/1000 - 1/5000. Predicted molecular weight: 34 kDa.</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>1/10 - 1/100.</td>
</tr>
</tbody>
</table>

Images
All lanes: Anti-ARH antibody [EPR13115] - N-terminal (ab181043) at 1/1000 dilution

Lane 1: Mouse heart tissue lysates
Lane 2: Mouse kidney tissue lysates
Lane 3: Rat heart tissue lysates
Lane 4: Rat kidney tissue lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 34 kDa
Observed band size: 36 kDa
why is the actual band size different from the predicted?

Exposure time: 3 minutes

Blocking/Diluting buffer and concentration: 5% NFDM/TBST
Western blot analysis of ARH in immunoprecipitation pellets from K562. ab181043 used at 1/30 dilution. Secondary antibody Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000.

Anti-ARH antibody [EPR13115] - N-terminal (ab181043) at 1/1000 dilution + Human fetal liver lysate at 10 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) (ab136636) at 1000 µg

Predicted band size: 34 kDa

All lanes: Anti-ARH antibody [EPR13115] - N-terminal (ab181043) at 1/5000 dilution

Lane 1: K562 cell lysate
Lane 2: 293T cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 36 kDa why is the actual band size different from the predicted?
Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES".

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