

Product datasheet

Anti-ARH antibody ab5082

1 References 1 Image

Overview

<b>Product name</b>	Anti-ARH antibody
<b>Description</b>	Goat polyclonal to ARH
<b>Host species</b>	Goat
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Xenopus laevis 
<b>Immunogen</b>	Synthetic peptide: DALKSAGRALIRS, corresponding to amino acids 9-21 of Human ARH. <a href="#">Run BLAST with ExPASy</a> <a href="#">Run BLAST with NCBI</a>
<b>Positive control</b>	human liver lysate
<b>General notes</b>	The protein encoded by this gene is a cytosolic protein which contains a phosphotyrosine binding (PTD) domain. The PTD domain has been found to interact with the cytoplasmic tail of the LDL receptor. Mutations in this gene lead to LDL receptor malfunction and cause the disorder autosomal recessive hypercholesterolaemia.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
<b>Primary antibody notes</b>	The protein encoded by this gene is a cytosolic protein which contains a phosphotyrosine binding (PTD) domain. The PTD domain has been found to interact with the cytoplasmic tail of the LDL receptor. Mutations in this gene lead to LDL receptor malfunction and cause the disorder autosomal recessive hypercholesterolaemia.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab5082** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 40-45 kDa (predicted molecular weight: 35 kDa). Can be blocked with <a href="#">Human ARH peptide (ab23072)</a> . Use RIPA lysis buffer.

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## Target

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### 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.

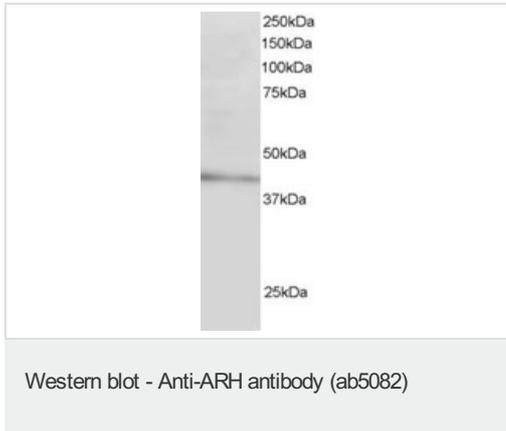
### Cellular localization

Cytoplasm.

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## Images

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Goat polyclonal to ARH, ab5082, (3µg/ml) of Human Liver lysate (RIPA buffer, 30µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence. Goat polyclonal to ARH, ab5082, (3µg/ml) of Human Liver lysate (RIPA buffer, 30µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

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