# Product datasheet

## Anti-ALDH1A3 antibody ab129815

**Product name**  
Anti-ALDH1A3 antibody

**Description**  
Rabbit polyclonal to ALDH1A3

**Host species**  
Rabbit

**Tested applications**  
Suitable for: WB, IP, ICC/IF, IHC-P

**Species reactivity**  
**Reacts with:** Mouse, Rat, Dog, Human, African green monkey, Syrian hamster  
**Predicted to work with:** Rabbit, Horse, Cow, Chimpanzee, Macaque monkey, Gorilla, Chinese hamster, Orangutan

**Immunogen**  
Synthetic peptide conjugated to KLH derived from within residues 100 - 200 of Human ALDH1A3. Read Abcam's proprietary immunogen policy

**Positive control**  
This antibody gave a positive signal in Human, Mouse and Rat Kidney tissue lysates. IHC-P: human stomach tissue sections. This antibody gave a positive result when used in the following formaldehyde fixed cell lines: PC3

## 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**  
PH: 7.40  
Preservative: 0.02% Sodium azide  
Constituent: PBS  
Note: Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

**Purity**  
Immunogen affinity purified

**Clonality**  
Polyclonal

**Isotype**  
IgG

## Applications

Our Abpromise guarantee covers the use of ab129815 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>WB</td>
<td>⭐⭐⭐⭐⭐✓</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>Use a concentration of 5 µg/ml.</td>
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<tr>
<td>ICC/IF</td>
<td></td>
<td>Use a concentration of 1 µg/ml.</td>
</tr>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.</td>
</tr>
</tbody>
</table>

**Target**

**Images**

- **All lanes**: Anti-ALDH1A3 antibody (ab129815) at 1 µg/ml
- **Lane 1**: Human kidney tissue lysate - total protein (ab30203)
- **Lane 2**: Kidney (Mouse) Tissue Lysate
- **Lane 3**: Kidney (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

- **All lanes**: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

- **Predicted band size**: 56 kDa
- **Observed band size**: 56 kDa
- **Additional bands at**: 12 kDa, 32 kDa, 37 kDa, 47 kDa, 50 kDa.

We are unsure as to the identity of these extra bands.

- **Exposure time**: 1 minute

This blot was produced using a 10% Bis-tris gel under the MOPS.
buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Bovine Serum Albumin before being incubated with ab129815 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

IHC image of ab129815 staining in human stomach 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 ab129815, 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.

ab129815 stained PC3 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 ab129815 at 1µg/ml overnight at +4°C. The secondary antibody (green) was DyLight® 488 goat anti- rabbit (ab96899) IgG (H+L) used at a 1/250 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.
ALDH1A3 was immunoprecipitated using 0.5mg Mouse Kidney tissue lysate, 5µg of Rabbit polyclonal to ALDH1A3 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Mouse Kidney tissue lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab129815.


Band: 56kDa; ALDH1A3

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