

### Anti-Aquaporin 1 antibody ab65837

★★★★★ [1 Abreviews](#) [11 References](#) [5 Images](#)

#### Overview

<b>Product name</b>	Anti-Aquaporin 1 antibody
<b>Description</b>	Rabbit polyclonal to Aquaporin 1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IHC-Fr, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human Aquaporin 1 (C terminal). Database link: <a href="#">P29972</a>
<b>Positive control</b>	WB: Rat Kidney and lung tissue lysate, SMMC cell Lysate. Flow Cyt (Intra): U2OS cells. IHC-P: Rat Kidney tissue.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Constituents: 0.45% Sodium chloride, 0.1% Dibasic monohydrogen sodium phosphate, 2% Trehalose
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab65837 in the following tested applications.

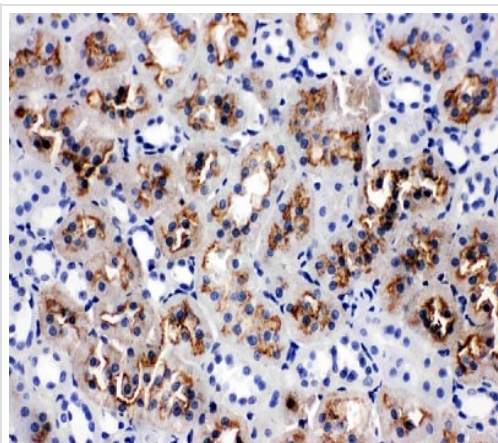
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 39 kDa (predicted molecular weight: 29 kDa).
IHC-P		Use a concentration of 0.5 - 1 µg/ml.
IHC-Fr		Use a concentration of 0.5 - 1 µg/ml.
Flow Cyt (Intra)		Use 1-3µg for 10 <sup>6</sup> cells.

## Target

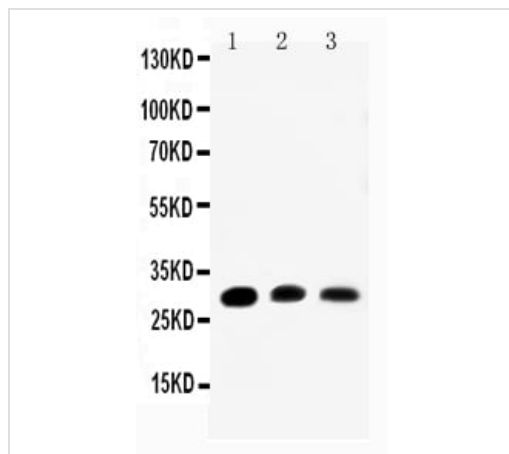
<b>Function</b>	Forms a water-specific channel that provides the plasma membranes of red cells and kidney proximal tubules with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.
<b>Tissue specificity</b>	Expressed in a number of tissues including erythrocytes, renal tubules, retinal pigment epithelium, heart, lung, skeletal muscle, kidney and pancreas. Weakly expressed in brain, placenta and liver.
<b>Sequence similarities</b>	Belongs to the MIP/aquaporin (TC 1.A.8) family.
<b>Domain</b>	Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA).
<b>Cellular localization</b>	Membrane.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody (ab65837)

Aquaporin 1 was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml ab65837 overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex with DAB as the chromogen.



Western blot - Anti-Aquaporin 1 antibody (ab65837)

**All lanes :** Anti-Aquaporin 1 antibody (ab65837) at 0.5 µg/ml

**Lane 1 :** Rat Kidney Tissue Lysate with 5% Non-fat Milk/ TBS

**Lane 2 :** Rat Lung Tissue Lysate with 5% Non-fat Milk/ TBS

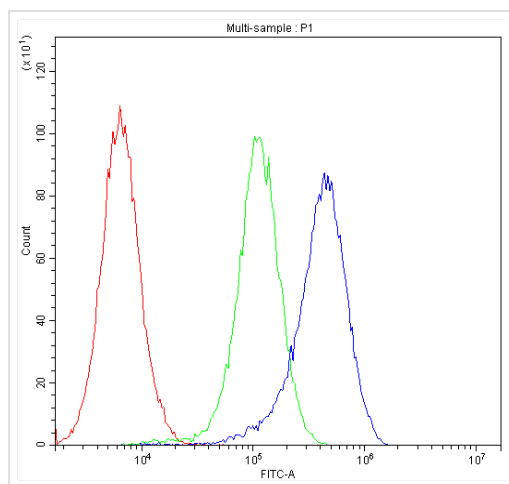
**Lane 3 :** SMMC Cell Lysate with 5% Non-fat Milk/ TBS

Lysates/proteins at 50 µg per lane.

### Secondary

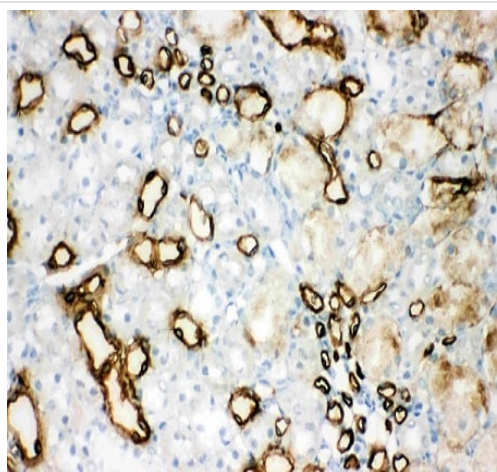
**All lanes :** goat anti-rabbit IgG-HRP at 1/10000 dilution

**Predicted band size:** 29 kDa



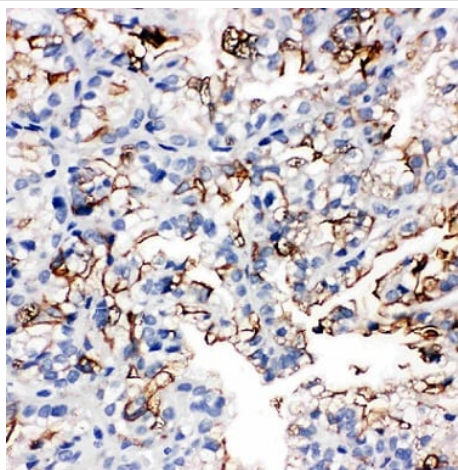
Flow Cytometry (Intracellular) - Anti-Aquaporin 1 antibody (ab65837)

Overlay histogram showing U2OS cells stained with ab65837 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Aquaporin 1 Antibody (ab65837, 1 µg/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10 µg/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 µg/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



Immunohistochemistry (Frozen sections) - Anti-Aquaporin 1 antibody (ab65837)

Aquaporin 1 was detected in frozen section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml ab65837 overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex with DAB as the chromogen.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Aquaporin 1 antibody (ab65837)

Aquaporin 1 was detected in paraffin-embedded section of human renal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml ab65837 overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex with DAB as the chromogen.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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