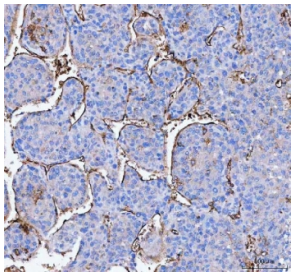
AQP1 Antibody / Aquaporin 1 (R30178)

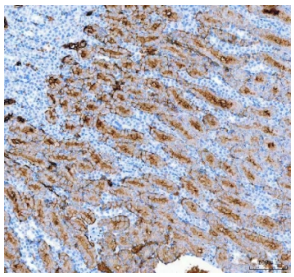
Catalog No.	Formulation	Size
R30178	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

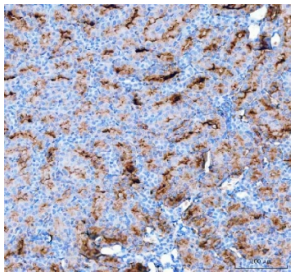
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P29972
Localization	Membrane
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/10^6 cells
Limitations	This AQP1 antibody is available for research use only.



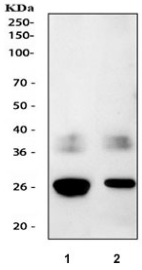
IHC staining of FFPE human liver cancer tissue with AQP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



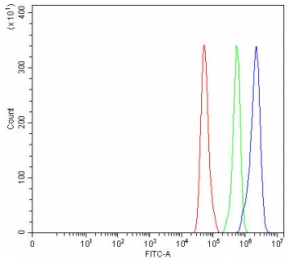
IHC staining of FFPE mouse kidney tissue with AQP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat kidney tissue with AQP1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) rat kidney and 2) mouse kidney tissue lysate with AQP1 antibody. Expected molecular weight ~28 kDa.



Flow cytometry testing of fixed and permeabilized human HeLa cells with AQP1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue=AQP1 antibody.

Description

Aquaporin 1 is a 28-kD integral protein though at first to be a breakdown product of the Rh polypeptide but was later shown to be a unique molecule that is abundant in erythrocytes and renal tubules as well as being expressed by the choroid plexus and various other tissues. It 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.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the AQP1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Aquaporin 1 (EEYDLDADDINSRVEMKPK) was used as the immunogen for this AQP1 antibody.

Storage

After reconstitution, the AQP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.