

Product datasheet

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ARG10648 anti-Aquaporin 3 antibody

Package: 50 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes Aquaporin 3

Tested Reactivity Hu, Ms, Rat

Tested Application FACS, ICC/IF, IHC-Fr, IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Aquaporin 3

Species Human

Immunogen Synthetic peptide around the C-terminus of Human Aquaporin 3. (EENVKLAHVKHKEQI)

Conjugation Un-conjugated

Alternate Names Aquaporin-3; GIL; Aquaglyceroporin-3; AQP-3

Application Instructions

Application table	Application	Dilution
	FACS	1 - 3 μg/10^6 cells
	ICC/IF	1 - 5 μg/ml
	IHC-Fr	1 - 5 μg/ml
	IHC-P	1 - 5 μg/ml
	WB	0.5 - 1 μg/ml
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid	
Purification	Affinity purification with immunogen.	
Buffer	PBS, 0.025% Sodium azide and 2.5% BSA.	
Preservative	0.025% Sodium azide	
Stabilizer	2.5% BSA	
Concentration	0.5 mg/ml	
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated	

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol AQP3

Gene Full Name aquaporin 3 (Gill blood group)

Background This gene encodes the water channel protein aquaporin 3. Aquaporins are a family of small integral

membrane proteins related to the major intrinsic protein, also known as aquaporin 0. Aquaporin 3 is localized at the basal lateral membranes of collecting duct cells in the kidney. In addition to its water channel function, aquaporin 3 has been found to facilitate the transport of nonionic small solutes such as urea and glycerol, but to a smaller degree. It has been suggested that water channels can be functionally heterogeneous and possess water and solute permeation mechanisms. [provided by RefSeq, Aug 2011] Water channel required to promote glycerol permeability and water transport across cell membranes.

Acts as a glycerol transporter in skin and plays an important role in regulating SC (stratum corneum) and epidermal glycerol content. Involved in skin hydration, wound healing, and tumorigenesis. Provides kidney medullary collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient. Slightly permeable to urea and may function as a water and urea exit mechanism in antidiuresis in collecting duct cells. It may play an important role in gastrointestinal tract

water transport and in glycerol metabolism (By similarity). [UniProt]

Calculated Mw 32 kDa

Images

Function

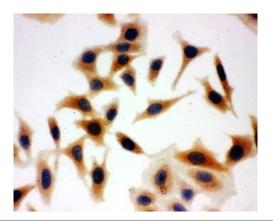
AOP-3



ARG10648 anti-Aquaporin 3 antibody WB image

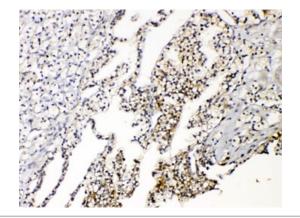
Western blot: HaCaT stained with ARG10648 anti-Aquaporin 3 antibody.

From Huang PH et al. Pharmaceutics- (2019), <u>doi:</u> 10.3390/pharmaceutics11080399, Fig. 10C.



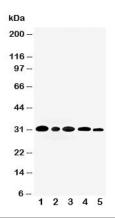
ARG10648 anti-Aquaporin 3 antibody ICC/IF image

Immunocytochemistry: HeLa cells stained with ARG10648 anti-Aquaporin 3 antibody.



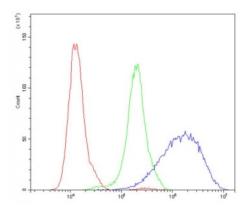
ARG10648 anti-Aquaporin 3 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human renal cancer tissue. Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 20 min. The tissue section was stained with ARG10648 anti-Aquaporin 3 antibody.



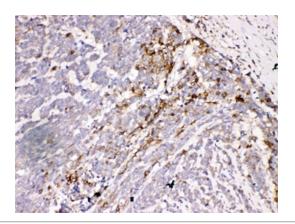
ARG10648 anti-Aquaporin 3 antibody WB image

Western blot: 1) Rat kidney, 2) Rat lung, 3) Mouse kidney, 4) MDA-MB-453, a human breast cancer line, and 5) SMMC-7221, a human hepatocarcinoma cell line. Lysates stained with ARG10648 anti-Aquaporin 3 antibody.



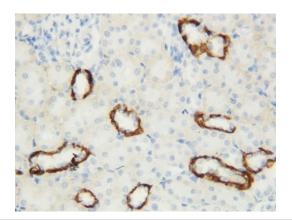
ARG10648 anti-Aquaporin 3 antibody FACS image

Flow Cytometry: HeLa cells were blocked with goat sera and stained with ARG10648 anti-Aquaporin 3 antibody at 1 μ g/10^6 cells (blue); Cells alone (red); Isotype control (green).



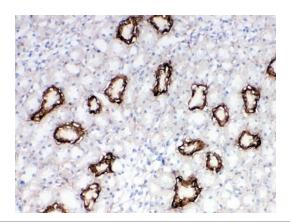
ARG10648 anti-Aquaporin 3 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 20 min. The tissue section was stained with ARG10648 anti-Aquaporin 3 antibody.



ARG10648 anti-Aquaporin 3 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue stained with ARG10648 anti-Aquaporin 3 antibody.



ARG10648 anti-Aquaporin 3 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat kidney tissue stained with ARG10648 anti-Aquaporin 3 antibody.