

Datasheet: MCA2099

BATCH NUMBER 147460

Description:	MOUSE ANTI AQUAPORIN 1
Specificity:	AQUAPORIN 1
Other names:	AQP1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1/A5F6
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen	■			1/500 - 1/1000
Immunohistology - Paraffin (1)	■			1/500 - 1/1000
ELISA	■			1/1000 - 1/20000
Immunoprecipitation			■	
Western Blotting	■			1/1000 - 1/5000
Immunofluorescence	■			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Mouse, Rat, Rabbit</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>

Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide (NaN ₃) 0.1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Synthetic peptide corresponding to amino acids 249-269 of aquaporin 1.
External Database Links	<p>UniProt: P29972 Related reagents</p> <p>Entrez Gene: 358 AQP1 Related reagents</p>
Synonyms	CHIP28
RRID	AB_2056838
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with the cells of the Sp-2/0 Ag14 mouse myeloma cell line.
Specificity	<p>Mouse anti Human aquaporin 1 antibody, clone 1/A5F6 recognizes an epitope within the cytoplasmic domain of the water-specific channel aquaporin 1, also known as AQP1 or CHIP-28.</p> <p>Aquaporin 1 is a ~28 kDa integral membrane protein which was originally identified in red blood cells and the kidney. AQP1 is also expressed by the choroid plexus and various other tissues. The glycosylated forms of AQP1 range between 40-60 kDa.</p>
Histology Positive Control Tissue	Kidney
References	<ol style="list-style-type: none"> 1. Nagy G <i>et al.</i> (2002) Development and characterisation of a monoclonal antibody family against aquaporin 1 (AQP1) and aquaporin 4 (AQP4). Pathol Oncol Res. 8 (2): 115-24. 2. Bódis, B. <i>et al.</i> (2001) Active water selective channels in the stomach: investigation of aquaporins after ethanol and capsaicin treatment in rats. J Physiol Paris. 95 (1-6): 271-5. 3. Francone, V.P. <i>et al.</i> (2010) Signaling from the secretory granule to the nucleus: Uhmk1 and PAM. Mol Endocrinol. 24: 1543-58. 4. Felszeghy, S. <i>et al.</i> (2004) Expression of aquaporin isoforms during human and mouse tooth development. Arch Oral Biol. 49: 247-57. 5. Ripoche, P. <i>et al.</i> (2004) Human Rhesus-associated glycoprotein mediates facilitated

- transport of NH(3) into red blood cells. [Proc Natl Acad Sci U S A. 101: 17222-7.](#)
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12. Ferré-Dolcet, L. *et al.* (2019) Uterine and placental specific localization of AQP2 and AQP8 is related with changes of serum progesterone levels in pregnant queens. [Theriogenology. 142: 149-57.](#)
13. Hsu, K. *et al.* (2017) Adaptable interaction between aquaporin-1 and band 3 reveals a potential role of water channel in blood CO₂ transport. [FASEB J. 31 \(10\): 4256-64.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2099>
10041

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M366184:200529'

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