

ARG11102 anti-Aquaporin 7 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Aquaporin 7
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Bov, Sheep
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Aquaporin 7
Species	Rat
Immunogen	KLH-conjugated and amidated peptide within aa. 150-200 of Rat Aquaporin 7.
Conjugation	Un-conjugated
Alternate Names	Aquaporin-7; AQP7L; AQPap; AQP-7; GLYCQTL; Aquaporin-7-like; AQP9; Aquaporin adipose; Aquaglyceroporin-7

Application Instructions

Application table	Application	Dilution
	WB	1:500
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 31 kDa	

Properties

Form	Liquid
Purification	Affinity purified.
Buffer	Tris, HCl/glycine buffer (pH 7.4-7.8), cryo-protective agents, Hepes, 0.02% Sodium azide, 30% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	30% Glycerol and 0.5% BSA
Concentration	0.55 - 0.58 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. 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.

Bioinformation

Gene Symbol	AQP7
Gene Full Name	aquaporin 7
Background	This gene encodes a member of the aquaporin family of water-selective membrane channels. The encoded protein localizes to the plasma membrane and allows movement of water, glycerol and urea across cell membranes. This gene is highly expressed in the adipose tissue where the encoded protein facilitates efflux of glycerol. In the proximal straight tubules of kidney, the encoded protein is localized to the apical membrane and prevents excretion of glycerol into urine. The encoded protein is present in spermatids, as well as in the testicular and epididymal spermatozoa suggesting an important role in late spermatogenesis. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. This gene is located adjacent to a related aquaporin gene on chromosome 9. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Dec 2015]
Function	Forms a channel that mediates water and glycerol transport across cell membranes at neutral pH (PubMed:9405233, PubMed:11952783, PubMed:30423801, PubMed:30420639). The channel is also permeable to urea (PubMed:9405233). Plays an important role in body energy homeostasis under conditions that promote lipid catabolism, giving rise to glycerol and free fatty acids. Mediates glycerol export from adipocytes. After release into the blood stream, glycerol is used for gluconeogenesis in the liver to maintain normal blood glucose levels and prevent fasting hypoglycemia. Required for normal glycerol reabsorption in the kidney (By similarity). [UniProt]
Calculated Mw	29 kDa
Cellular Localization	Membrane; Multi-pass membrane protein. [UniProt]