



Rabbit Anti-Human AQP7 (aa 251-342) polyclonal antibody (CABT-L257R)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	May also react with Rat, Chicken, Dog, Pig, Cow
Target	AQP7
Immunogen	KLH conjugated synthetic peptide derived from human AQP7:251-342/342
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse
Purification	Affinity purified by Protein A
Conjugate	Unconjugated
Applications	WB, ELISA, IHC-P, IHC-F, FC, IF
	Recommended dilution
	WB=1:500-2000 ELISA=1:5000-10000
	IHC-P=1:100-500 IHC-F=1:100-500 Flow-Cyt=2ug/test
	IF=1:100-500
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Sequence Similarities	Belongs to the MIP/aquaporin (TC 1.A.8) family.
Molecular Weight	37kDa
Cellular Localization	Membrane; Multi-pass membrane protein.

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Format	Liquid
Concentration	Lot specific
Size	50 μΙ, 100 μΙ, 200 μΙ
Buffer	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Preservative	0.03% Proclin300
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Ship	Wet ice

BACKGROUND

Introduction

Water is a critical component of all living cells. Interestingly, tissue membranes show a great degree of water permeability. Mammalian red cells, renal proximal tubules, and descending thin limb of Henle are extraordinarily permeable to water. Water crosses hydrophobic plasma membranes either by simple diffusion or through a facilitative transport mechanism mediated by special protein "aquaporin". Over the last decade, genes for several members of aquaporin family have been cloned, expressed, and their distribution studied in many tissues. AQP0 or MIP26 (major intrinsic protein 26kD), and Aquaporin 1 (AQP1, purified from red cells) also called CHIP28 (channel forming integral protein, 28kD; 268aa; gene locus 7p14) has been the foundation of the growing family of aquaporin. The lens specific AQP0 represents up to 80% of total lens membrane protein. Defects in MIP26 are cause of autosomal dominant cataract. The cataract Fraser mutation (CATFR or Shriveled) is a transposon induced splicing error that substitutes a long terminal repeat sequence for the C terminus of MIP. The lens opacity mutation (LOP) is an amino acid substitution that inhibits targeting of MIP to the cell membrane.

GENE INFORMATION

Entrez Gene ID	<u>364</u>
Function	Forms a channel for water and glycerol (By similarity).