Product Name: AQP2 (phospho Ser256) Rabbit Polyclonal Antibody
Catalog #: APRab04249

Summary

Production Name	AQP2 (phospho Ser256) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC-P,IF-P,IF-F,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	AQP2
Alternative Names	AQP2; Aquaporin-2; AQP-2; ADH water channel; Aquaporin-CD; AQP-CD; Collecting duct water channel protein; WCH-CD; Water channel protein for renal collecting duct
Gene ID	359.0
SwissProt ID	P41181.The antiserum was produced against synthesized peptide derived from human Aquaporin 2 around the phosphorylation site of Ser256. AA range:222-271

Application

Dilution Ratio	IHC-P 1:100-1:300, ELISA 1:40000, IF-P/IF-F/ICC/IF 1:50-200
Molecular Weight	

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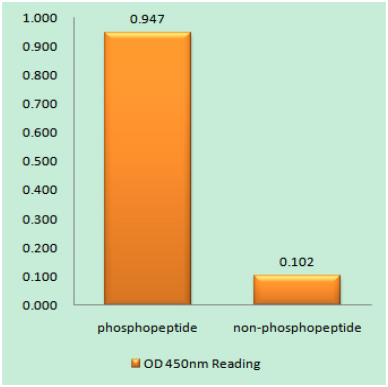
Background

This gene encodes a water channel protein located in the kidney collecting tubule. It belongs to the MIP/aquaporin family, some members of which are clustered together on chromosome 12q13. Mutations in this gene have been linked to autosomal dominant and recessive forms of nephrogenic diabetes insipidus. [provided by RefSeq, Oct 2008],disease:Defects in AQP2 are the cause of diabetes insipidus nephrogenic autosomal (ANDI) [MIM:125800]; also known as diabetes insipidus nephrogenic type 2. ANDI is caused by the inability of the renal collecting ducts to absorb water in response to arginine vasopressin. It is characterized by excessive water drinking (polydypsia), excessive urine excretion (polyuria), persistent hypotonic urine, and hypokalemia. Inheritance can be autosomal dominant or recessive.,domain:Aquaporins contain two tandem repeats each containing three membrane-spanning domains and a pore-forming loop with the signature motif Asn-Pro-Ala (NPA).,function:Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.,online information:AQP2 pages,PTM:Ser-256 phosphorylation is necessary and sufficient for expression at the apical membrane. Endocytosis is not phosphorylation-dependent.,similarity:Belongs to the MIP/aquaporin (TC 1.A.8) family.,subcellular location:Shuttles from vesicles to the apical membrane.,tissue specificity:Expressed in renal collecting tubules.,

Research Area

Image Data



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Aquaporin 2 (Phospho-Ser256) Antibody

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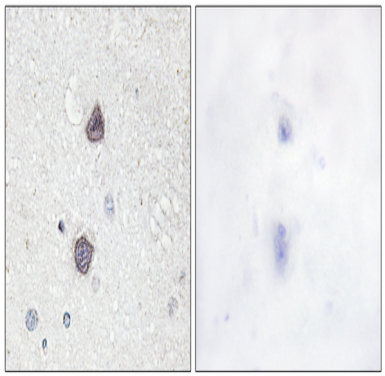

Immunohistochemistry analysis of paraffin-embedded human brain, using Aquaporin 2 (Phospho-Ser256) Antibody. The picture on the right is blocked with the phospho peptide.

Note

For research use only.