



Polyclonal Anti- Aquaporin 5, *AQP5* (Sepharose Bead Conjugate)

Catalogue No. PA1230-S

Lot No. 08G01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Rat, mouse. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP))

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human AQP5, different to the related rat sequence by three amino acids.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN₃ preservative.

Storage

Store at 4°C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

Aquaporin 5, also known as AQP5, is a water channel protein. The aquaporins (AQPs) are a family of more than 10 homologous water transporting proteins expressed in many mammalian epithelia and endothelia. At least five AQPs are expressed in the eye: AQP0 (MIP) in lens fiber, AQP1 in cornea endothelium, ciliary and lens epithelia and trabecular meshwork, AQP3 in conjunctiva, AQP4 in ciliary epithelium and retinal Müller cells, and AQP5 in corneal and lacrimal gland epithelia.¹ Among the seven human aquaporins cloned to date (AQPs 0-6), genes encoding the four most closely related aquaporins (AQP0, AQP2, AQP5, and AQP6) have been mapped to chromosome band 12q13, suggesting an aquaporin family gene cluster at this locus.² Aquaporin 5 plays a role in the generation of saliva, tears and pulmonary secretions.

REFERENCE

1. Verkman AS (2003). "Role of aquaporin water channels in eye function.". *Exp. Eye Res.* 76 (2): 137–43.
2. Ma T, Yang B, Umenishi F, Verkman AS (1997). "Closely spaced tandem arrangement of AQP2, AQP5, and AQP6 genes in a 27-kilobase segment at chromosome locus 12q13.". *Genomics* 43 (3): 387–9.