

Product Datasheet

Aquaporin 4 Antibody (orb1906388)

Description

Aquaporin 4 Antibody

Species/Host

Mouse

Reactivity

Human, Mouse

Conjugation

Unconjugated

Tested

ELISA, FA, FC, IP

Applications
Immunogen

The original antibody was generated by immunizing an aquaporin 4 knock out mice with human AQP4 as an immunogen expressed on the surface of baculovirus.

Target

Aquaporin 4

Preservatives

PBS with 0.02% Proclin 300.

Concentration

1 mg/ml

Storage

Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Note

For research use only

Application notes

This antibody binds extracellular domain of human aquaporin 4 with a very high binding affinity. The binding of this antibody inhibits the binding of NMO-IgG to AQP4 (PMID: 23746426). The binding affinity of this antibody for human AQP4 M23 isoform expressed on the surface of baculovirus and CHO cells was tested with ELISA (PMID: 26398585; WO2014196658). The binding characterization of this antibody was done using flow cytometry. This antibody can be used for the immunoprecipitation of human AQP4 but not mouse AQP4 (WO2014196658; PMID: 23909421). This antibody is not suitable for detection of denatured human AQP4 in a western blot assay (WO2014196658). Live imaging using Alexa-Fluor-555-labelled antibodies revealed that this antibody more rapidly bound to cells expressing human aquaporin-4 and strongly enhanced endocytosis and lysosomal degradation of AQP4, especially in cells expressing the M1 isoform alone. Chimeric D15107 prevented complement-dependent cytotoxicity induced by NMO-IgG from patient sera in vitro (PMID: 26398585).

Isotype

IgG

Biorbyt Ltd.

7 Signet Court, Swann's Road, Cambridge, CB5 8LA, United Kingdom

Email: info@biorbyt.com | Phone: +44 (0) 1223 859-353 | Fax: +44 (0)1223 280 240

Biorbyt LLC.

68 TW Alexander Drive
Research Triangle Park
Durham, North Carolina
27709, United States

Email: info@biorbyt.com | Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558