Astrocytes and epilepsy
16 September 2019, by Leigh MacMillan

Increased AQP4 expression has been previously reported in temporal lobe epilepsy, supporting a broader role for this protein in astrocyte dysfunction that leads to seizure activity. AQP4 may represent a novel therapeutic target for the treatment of epilepsy in TSC and perhaps other seizure disorders.

More information: Brittany Short et al. Cerebral aquaporin-4 expression is independent of seizures in tuberous sclerosis complex, Neurobiology of Disease (2019). DOI: 10.1016/j.nbd.2019.05.003

Provided by Vanderbilt University

This is an astrocyte, labeled with GFAP (red), Focal Adhesion Kinase (FAK) green, and nuclear stain To-Pro (blue). Credit: Nathan S. Ivey at TNPRC. Via Wikipedia.