

Calcium signalling in astrocytes represents an important component, which enables proper neuronal functioning under physiological conditions. Alterations in Ca^{2+} signalling, accompanied by an increase in intracellular calcium levels is a hallmark for numerous pathological states of central nervous system, such as traumatic and ischemic brain/spinal cord injuries, epilepsy as well as neurodegenerative diseases, such as Alzheimer's disease and psychiatric disorders, such as schizophrenia. The research analyzing the molecular components of astrocytic Ca^{2+} signalling can help us understand the control mechanisms used in calcium signalling and thus be greatly beneficial for further therapeutic research.