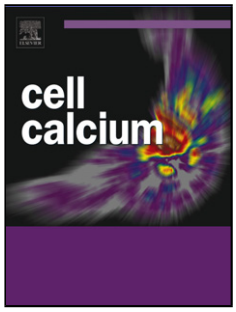

Title: Modulation of P2X7 purinergic receptor activity by extracellular Zn^{2+} in cultured mouse hippocampal astroglia

Authors: Gergely Kovács, Zsuzsanna Környei, Krisztina Tóth, Mária Baranyi, János Brunner, Máté Neubrandt, Ádám Dénes, Beáta Sperlágh

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Modulation of P2X7 purinergic receptor activity by extracellular Zn^{2+} in cultured mouse hippocampal astroglia.

Running title: *Hippocampal P2X7 receptors and zinc*

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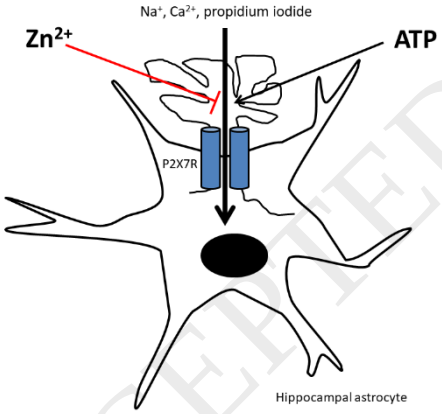
Graphical Abstract



Highlights

- P2X7 receptor (P2X7R) was expressed in both neurons and glial cells in primary mouse hippocampal neuron-glial culture
- Propidium iodide uptake via P2X7Rs was inhibited by extracellular Zn^{2+} in both cell types
- Extracellular free zinc ions decreased P2X7R-mediated calcium influx in glial cells

ABSTRACT