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Protocol for Investigating Neuronal Communication via Gap Junctions

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Protocol status: Working
We use this protocol and it's working

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Keywords: gjs intercellular communication among neuron, neuronal communication via gap junction, axonal communication through gj, axonal communication, intercellular communication, investigating neuronal communication, axonal degeneration, sarm1 activation, sensory neuron, sarm1 activity, neuron, cell death, gap junction, targeted therapy, developing targeted therapy, sarm1, drg communication system, cell, understanding of sensory disorder

Abstract

This protocol established a DRG communication system to study axonal communication through GJs. SARM1, an NAD-consuming enzyme, regulates axonal degeneration. Using the SARM1 activity-detecting probe PC11, we found that intercellular communication may regulate SARM1 activation, protecting against axonal degeneration. A related study utilizing this protocol has been published in *Cell Death and Disease*. This novel approach offers a streamlined method for researches of sensory neuron and GJs intercellular communication among neurons, with potential for advancing our understanding of sensory disorders and developing targeted therapies.

Attachments

PDF

Communication protoc...

820KB

Troubleshooting