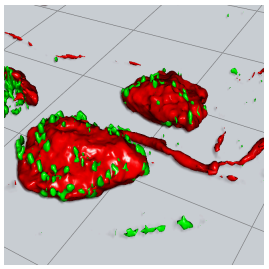
Apr 23, 2020

Light microscopic analysis of synaptic input to neurons in the rat major pelvic ganglion [keast-003]



In 1 collection

DOI
https://dx.doi.org/10.17504/protocols.io.bakiicue

Janet Keast[1], Peregrine Osborne[1]

[1]University of Melbourne

SPARC
Tech. support email: **info@neuinfo.org**

Janet R Keast
University of Melbourne

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN ACCESS

DOI: https://dx.doi.org/10.17504/protocols.io.bakiicue

Collection Citation: Janet Keast, Peregrine Osborne 2020. Light microscopic analysis of synaptic input to neurons in the rat major pelvic ganglion [keast-003]. **protocols.io https://dx.doi.org/10.17504/protocols.io.bakiicue**

License: This is an open access collection distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

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

Created: December 17, 2019

Last Modified: November 27, 2023

Collection Integer ID: 31082

Keywords: Immunohistochemistry, immunofluorescence, retrograde tracing, tract tracing, synapse, pelvic ganglion autonomic neurons of adult, major pelvic ganglion, classified pelvic ganglion, ganglion neuron, image analysis of synaptic bouton, pelvic ganglia, neurons in the rat, light microscopic analysis of synaptic input, synaptic bouton, neural tissue, neural tissues of interest, synaptic input, neuron, confocal microscopy, autonomic neuron, immunohistochemical labeling of thick cryosection, more sites within the lower urinary tract, microscopy, ganglia, lower urinary tract, fluorescent retrograde tracer

Abstract

This collection describes the procedures required to visualise and characterize synaptic boutons associated with functionally classified pelvic ganglion autonomic neurons of adult male and female Sprague-Dawley rats. This collection includes protocols for:

STAGE 1: Surgery to micro-inject fluorescent retrograde tracer dyes into one or more sites within the lower urinary tract

STAGE 2: Intracardiac perfusion with fixative to preserve neural tissues of interest

STAGE 3: Immunohistochemical labeling of thick cryosections of pelvic ganglia

STAGE 4: Confocal microscopy and image analysis of synaptic boutons associated with ganglion neurons.

Files

SEARCH

Protocol

NAME

Use of tracer dyes to label neural projections to lower urinary tract organs

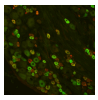
VERSION 1

CREATED BY

Janet R Keast
University of Melbourne

OPEN →

Protocol



NAME

Intracardiac perfusion with fixative for anatomical studies

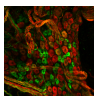
VERSION 1

CREATED BY

Janet R Keast
University of Melbourne

OPEN →

Protocol



NAME

Immunohistochemical labeling of thick cryosections from pelvic ganglia

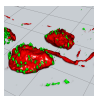
VERSION 1

CREATED BY

Janet R Keast
University of Melbourne

OPEN →

Protocol



NAME

Confocal microscopy and characterization of synaptic boutons associated with ganglion neurons

VERSION 1

CREATED BY

Janet R Keast
University of Melbourne

OPEN →