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Immediate Early Gene (IEG) mapping of spinal cord neurons activated by cystometry-induced micturition in rats [keast-002]

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1 Works for me dx.doi.org/10.17504/protocols.io.bakxicxn

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ABSTRACT

This collection describes the procedures required to visualize and characterize lumbosacral spinal neurons that are activated by cystometry of awake adult male and female Sprague-Dawley rats. This collection includes protocols for:

STAGE 1: Surgery to cannulate the bladder, followed by recovery then cystometry

STAGE 2: Intracardiac perfusion with fixative to preserve the spinal cord tissue

STAGE 3: Immunohistochemical labelling of spinal cord sections to visualise immediate early gene expression in specific spinal regions and neuronal populations

STAGE 4: Microscopy and image analysis to assess patterns of immediate early gene expression in different spinal cord regions

Files



Cystometry in awake rats
by Janet Keast,
University of Melbourne



Intracardiac perfusion with fixative for anatomical studies
by Janet Keast,
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Immunohistochemical labelling of spinal cord neurons involved in bladder activity
by Janet Keast,
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Image analysis of immediate early gene expression in spinal cord sections
by Janet Keast,
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