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Quantification of TH immunoreactivity

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Protocol status: Working

We use this protocol and it's working

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Abstract

This protocol describes quantification of TH immunoreactivity.

Attachments



[731-1842.docx](#)

13KB

Materials

Apparatus

1. Confocal microscope
2. Image J software

Procedure

- 1 TH signals from bilateral striatum and cortex are imaged under a 20x objective lens using identical imaging settings.
- 2 Open the confocal files in Image J software.
- 3 Using the "Rectangle" function to select an area (width x high = 150 × 150) in striatum sections from both hemispheres for TH quantification.
- 4 Using the "Measure" function to measure the gray value of the selected area and write down the mean value of striatum slice, $M^{\text{striatum-LHS}}$ and $M^{\text{striatum-RHS}}$.
- 5 Using the "Rectangle" function to select an area (width x high = 150 × 150) in cortical sections from both hemispheres for TH quantification.
- 6 Using the "Measure" function to measure the gray value of the selected area and write down the mean value of cortical slice, $M^{\text{cortex-LHS}}$ and $M^{\text{cortex-RHS}}$.
- 7 TH quantification =
$$\frac{(M^{\text{striatum-LHS}} - M^{\text{cortex-LHS}})}{(M^{\text{striatum-RHS}} - M^{\text{cortex-RHS}})}.$$