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LRRK2 Staining in mouse brain sections V.1

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Protocol status: Working

We use this protocol and it's working

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Abstract

LRRK2 is a widely expressed, multifunctional protein. *LRRK2* mutations are the major cause to inherited and sporadic PD. Staining of LRRK2 in mouse brain can be challenging. This protocol provides an optimised way to achieve LRRK2 staining in mouse brain sections.



- 1 Prepare brain cryosections in 20µm thickness
- 2 Blocking with 5% serum (preferably same serum as host of secondary antibody) 30 min RT
- 3 Wash with PBS 5 min 2x
- 4 Permeabilize with 0.5% Triton 15 min RT
- 5 Wash with PBS 5 min 2x
- 6 VECTOR® antigen unmasking solution 48ul/5ml water (in small glass sample vial). Microwave 10-20sec until boiled before use (or pre-heat to 100°C on heat plate)
- 7 Incubate at 100°C for 30min (<5 section / 5ml) then cool to room temperature (about 20min)
- 8 Wash with PBS 5 min 2x
- 9 Blocking with 5% serum 16-24hr 4°C
- 10 Wash with PBS 5 min 2x
- 11 Primary incubation 1% serum + 0.1% Triton 30-48 hr 4°C LRRK2 1:200 (Catalog number: N241A); Co-stained often with TH antibody
- 12 Wash with PBS 5 min 2x
- 13 Secondary incubation 1% serum + 0.1% Triton 1-2 hr RT Alexa Fluor 1:300



- 14 Wash with PBS 5 min 2x
- 15 Mount with ProLong™ Gold Antifade Mountant with DAPI