

1 **Sialic acid and PirB are not required for viral targeting of**
2 **neural circuits by neurotropic mammalian orthoreovirus**

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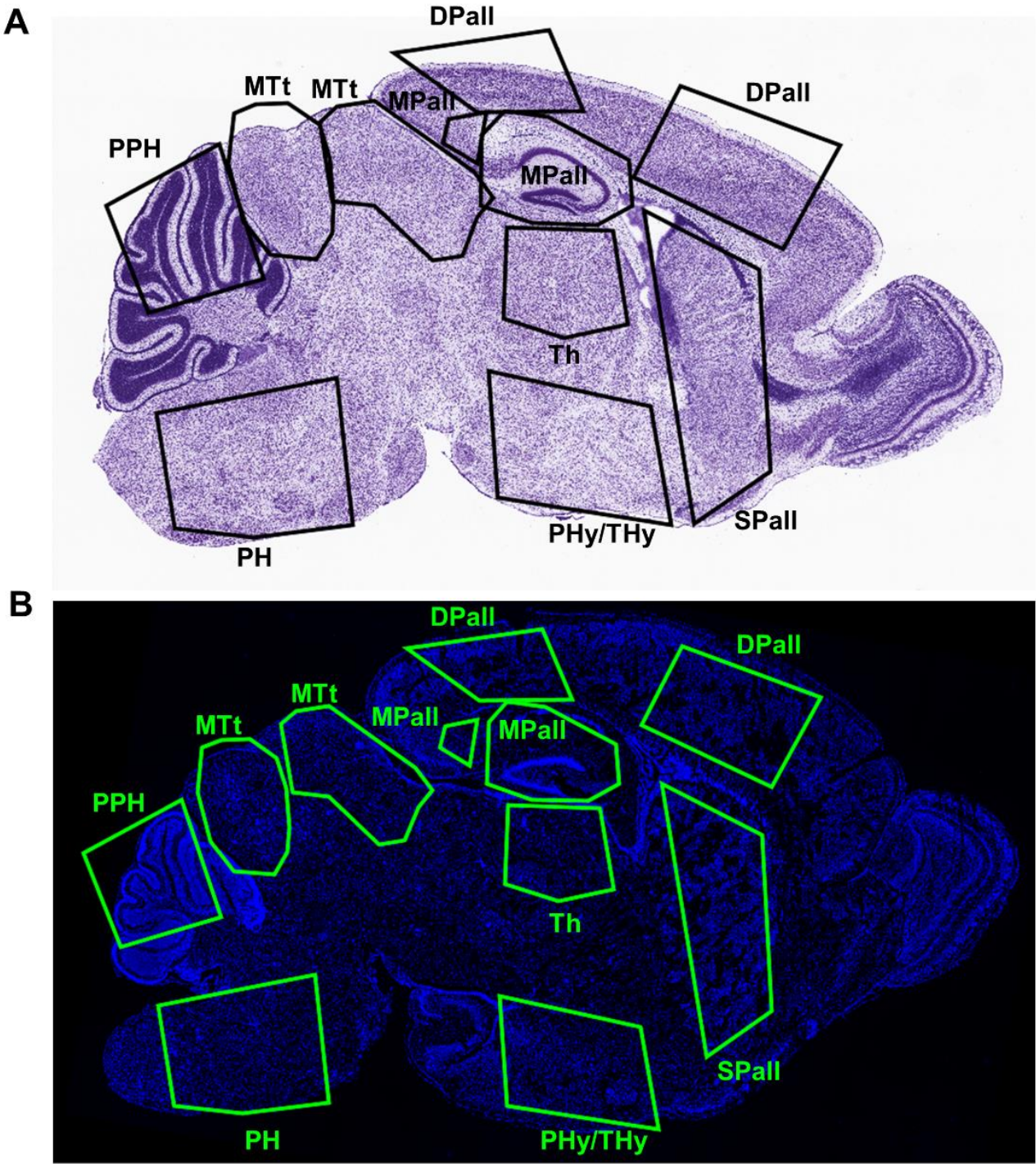
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17 Running Head: Reovirus neurotropism in the central nervous system

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22 **FIG S1** Histological mapping approach using a mouse brain atlas to quantify
 23 **regional relative infection density.** (A) Nissl-stained sagittal brain slice from the Allen
 24 Developing Mouse Brain Reference Atlas (Allen Developing Mouse Brain Reference

25 Atlas P14, developingmouse.brain-map.org and atlas.brain-map.org/) overlaid with
26 regions of interest (ROI). Identical ROIs were individually overlaid onto all imaged
27 sections according to brain landmarks (1,2). **(B)** ROIs (green outlines) overlaid on a
28 Hoechst-dye-stained brain slice from a mock-infected animal. Brain regions are
29 indicated. DPall, dorsal pallium; MTt, collicular midbrain tectum; MPall, medial pallium;
30 PH, pontine hindbrain; PPH, prepontine hindbrain; Th, thalamus; Thy+PHy,
31 hypothalamus; SPall, subpallium. Some regions (such as DPall, MPall, and MTt) are
32 quantified from multiple ROIs.

33 **Supplemental Movie S1A. Imaged volume of reovirus-infected brain tissue**
34 **visualized using MiPACT-HCR.** Two-day-old WT mice were inoculated IC with 1000
35 PFU T3SA+, and right-brain hemispheres were processed for MiPACT-HCR as
36 described in FIG 2. Tissue was imaged using MesoSPIM microscopy and processed
37 into a video using Imaris software (Oxford Instruments). Reovirus RNA is depicted in
38 green. Movie of sagittal optical sections across entire brain hemisphere. Scale bar, 1000
39 μm .

40 **Supplemental Movie S1B. Imaged volume of reovirus-infected brain tissue**
41 **visualized using MiPACT-HCR.** Two-day-old WT mice were inoculated IC with 1000
42 PFU T3SA+, and right-brain hemispheres were processed for MiPACT-HCR as described
43 in FIG 2. Tissue was imaged using MesoSPIM microscopy and processed into a video
44 using Imaris software (Oxford Instruments). Reovirus RNA is depicted in green. Max
45 projection of z-stacks formatted for movie demonstrating reovirus RNA staining at cell
46 resolution in 3D. Scale bar, 50 μm .

47 **REFERENCES**

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