

# Inter-Alpha Inhibitor Proteins Modify the Microvasculature after Exposure to Hypoxia–Ischemia and Hypoxia in Neonatal Rats

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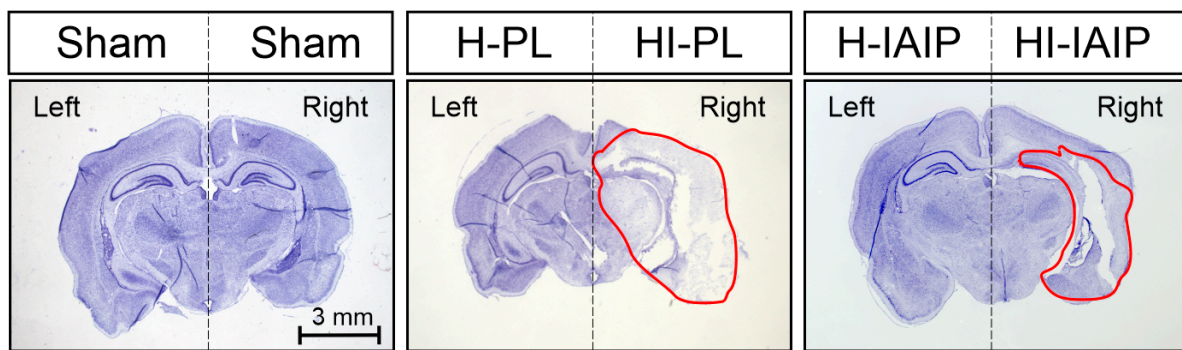
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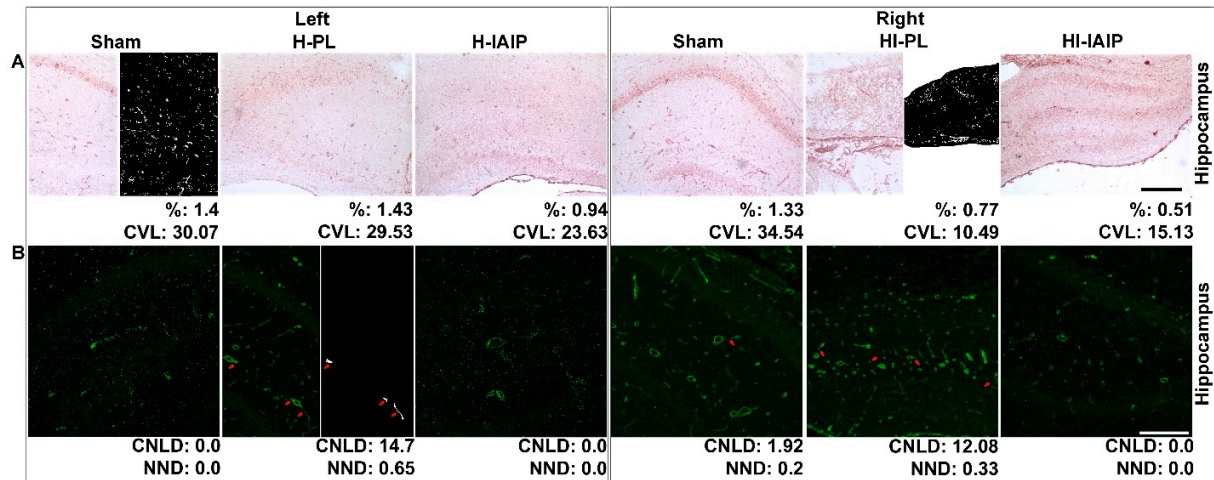
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**Supplementary Figure S1:**

Representative cresyl violet images of the coronal brain sections from the Sham, H/PL, HI-PL, and H/IAIP groups stained with cresyl violet 3 days after HI brain injury. Infarct areas were contoured with the red line. Scale bar = 3 mm. This Nissl-stained image is distinct from previous published Nissl images [1], which were obtained from neonatal rats using the same hypoxic-ischemic and hIAIP treatment procedures as in the current study.



### Supplementary Figure S2:

Representative images used in the quantitative analyses comparing sham-operated, hypoxia (H, left side of brain) and hypoxia-ischemia (HI, right side of brain) in a male neonatal rat brain vasculature.

A) Representative laminin immunohistochemical labeling and thresholded binary images of coronal hippocampal sections (acquired with a 10x lens light microscope) used to automatically measure the percent (%) of the laminin-stained area and the cumulative laminin<sup>+</sup> vessel length (CVL: expressed as multiples of 100  $\mu\text{m}$  of vessel length)/area (1  $\text{mm}^2$ ). Scale bar: 250  $\mu\text{m}$ ; field total area 975,440  $\mu\text{m}^2$ .

B) Representative immunofluorescence confocal laminin immunolabeling and thresholded binary images of coronal hippocampal sections (acquired with a 40x lens confocal microscope) used to localize (red arrows) and automatically measure the cumulative laminin<sup>+</sup> nanotube linear density (CNLD: expressed in  $\mu\text{m}/\text{acquired volume}$  expressed as  $10^6 \mu\text{m}^3$ ) and the nanotube numerical density (NND: number of identified nanotubes/acquired volume). Scale bar: 100  $\mu\text{m}$ ; field total volume 1.201  $10^6 \mu\text{m}^3$ .

### References:

- Chen, X.; Nakada, S.; Donahue, J. E.; Chen, R. H.; Tucker, R.; Qiu, J.; Lim, Y. P.; Stopa, E. G.; Stonestreet, B. S., Neuroprotective effects of inter-alpha inhibitor proteins after hypoxic-ischemic brain injury in neonatal rats. *Exp Neurol* **2019**, 317, 244-259.