

Type of the Paper (Article)

Thyroid Hormone Transporters MCT8 and OATP1C1 Are Expressed in Projection Neurons and Interneurons of Basal Ganglia and Motor Thalamus in the Adult Human and Macaque Brain

Ting Wang ^{1,3, †}, Yu Wang ^{1,3, †}, Ana Montero-Pedrazuela ², Lucía Prensa ¹, Ana Guadaño-Ferraz ^{2,*}, Estrella Rausell ^{1,*}

¹ School of Medicine, Dept Anatomy Histology & Neuroscience, Autónoma de Madrid University (UAM), 28029 Madrid, Spain.

² Instituto de Investigaciones Biomédicas Alberto Sols, Consejo Superior de Investigaciones Científicas (CSIC)-Autónoma de Madrid University (UAM), 28029 Madrid, Spain.

³ PhD Program in Neuroscience, Autónoma de Madrid University (UAM)-Cajal Institute, 28029 Madrid, Spain.

† These authors contributed equally to this work.

* Correspondence: ER: estrella.rausell@uam.es; AG-F: ana.guadano.ferraz@csic.es, aguadano@iib.uam.es.

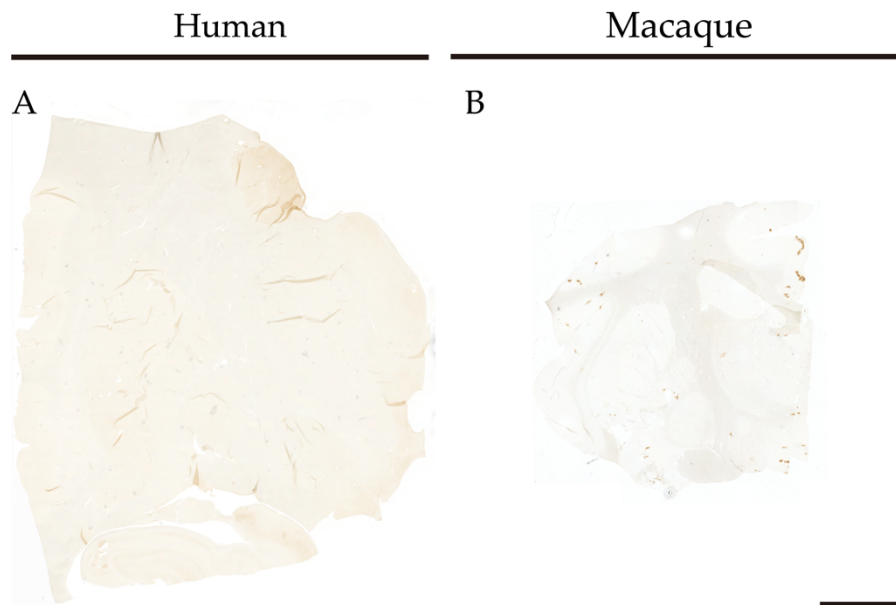


Figure S1. Negative control sections for the immunostaining protocol in human and macaque brain tissue. Representative brightfield photomicrographs show the results of the immunostaining procedure without the primary antibody in human and macaque brain tissue in sections that had been processed at the same time that those shown in the main text. (A) The caudate nucleus has a slightly nonspecific background, and (B) nonspecific DAB deposits can be seen at the tissue's edge or at the break caused by over-time DAB developing, however, no neural or capillary immunoreactivity is detected in human (A) or macaque (B) brain tissue sections without using primary antibodies. Scale bar = 8000 μm (A) 6000 μm (B).

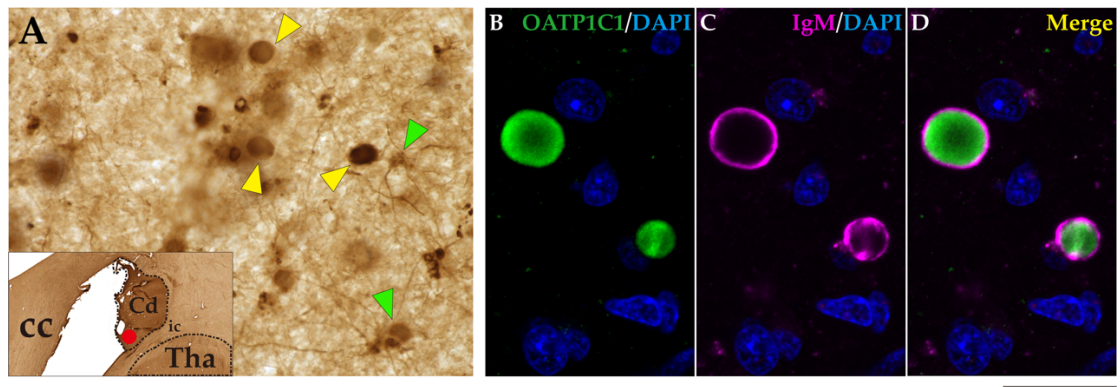


Figure S2. Expression of OATP1C1 in Corpora amylacea at the human neostriatum. Representative brightfield photomicrographs showing immunostaining for OATP1C1 in the human caudate nucleus. (A) Expression OATP1C1 in *Corpora amylacea* (yellow arrowheads) on the border of the caudate nucleus and ventricle. The high magnification image is extracted from the location at the red point in the lower magnification inset. Note some OATP1C1 immunopositive astrocyte-like cells (green arrowhead). (B-D) Confocal microscope images of double labeling for OATP1C1 (green, B), and the *Corpora amylacea* marker IgM (purple, C). The merged image (D) shows the colocalization of the OATP1C1 and IgM. Counter-staining with DAPI (blue) shows nuclei of all cells. cc: corpus callosum, Cd: caudate nucleus, ic: internal capsule, Tha: thalamus. Scale bar = 50 μ m (A) and 20 μ m (B-D).