

# Neuronal density in primary visual cortex (17 visual area), in two species of Octodon Densidad neuronal en la corteza visual primaria (Área 17), en dos especies de Octodon

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Studies show that environmental modifications can produce profound alterations in the normal development of the visual cortex and its connectivity. For the other hand it is possible that in natural conditions, animal species have developed genetic adaptations to the different conditions of luminance in which they normally behave. Recently have observed significant changes in cortical neuronal density of area 17 (primary visual area), in two sympatric Chilean rodents with different daily activity (*Phyllotis darwini* and *Abrothrix olivaceus*), but have not yet determined the genetic nature or plastic such differences. In this paper we compared species with a closer phylogenetic relation so as to minimize the taxonomic variable. We studied the primary visual cortex (area 17) of wild rodents native of the species *Octodon degus* (n=5) and *Octodon bridgesi* (n=3), belonging to the Octodontidae family, in order to show changes in the neuronal density, using celloidin-embedded, 40 $\mu$ m-thickness Niss