

[Layer-to-layer distribution of neurons and macroglial cells in various zones of the cat auditory cortex (quantitative study)].

[Article in Russian]

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Abstract

Quantitative analysis of layer-to-layer distribution of neurons and macroglial cells in zones AI, AII, Ep and Ins of cat brain was performed in specimens stained after Einarson. Zones of auditory cortex were shown not to differ in density of neuron distribution. In every zone the neuron number in layers II, III and VI was significantly higher than in layers IV and V and in layers III and IV of zones AI and AII the number of neurons with macroglial satellites was almost twice higher than in the same layers of zones Ep and Ins. Fraction of neurons with different number of satellites shows significant diversities as well. In layers IV, V and VI of zones AI and AII both total number of macroglial cells and perineuronal satellites was significantly higher than in zones Ep and Ins. The number of perineuronal satellitocytes correlates both with neuron axonal length and the level of the cell functional activity.