

Title	Extraneuronal localization of acetylcholine and its release upon nicotinic stimulation in rabbits
Sub Title	
Author	川島, 紘一郎(Kawashima, Koichiro) 大畑, 尚代(Ohata, Hisayo) 藤本, 和子(Fujimoto, Kazuko) 鈴木, 岳之(Suzuki, Takeshi)
Publisher	共立薬科大学
Publication year	1990
Jtitle	共立薬科大学研究年報 (The annual report of the Kyoritsu College of Pharmacy). No.35 (1990.) ,p.62- 62
JaLC DOI	
Abstract	
Notes	抄録
Genre	Technical Report
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00062898-00000035-0062

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the Keio Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

Extraneuronal Localization of Acetylcholine and Its Release upon Nicotinic Stimulation in Rabbits*

Koichiro KAWASHIMA, Hisayo OOHATA, Kazuko FUJIMOTO and Takeshi SUZUKI

川島紘一郎, 大畑尚代, 藤本和子, 鈴木岳之

A study was undertaken to examine the origin of plasma acetylcholine (ACh). The ACh content of blood cells was about 25 times higher than that of plasma in normal rabbits (3,722 vs 140 pg/ml blood, $n=7$). Plasma ACh content in rabbits having antibody against ACh was about 80 times higher than in normal rabbits, while no difference was observed in the ACh content of blood cells between the groups. Nicotine (100 μ g/kg, i.v.) produced a significant increase in plasma ACh content and a decrease in the ACh content of blood cells in normal rabbits. These data demonstrate that a large amount of ACh is localized in blood cells and that a considerable proportion of plasma ACh originates from blood cells, suggesting that ACh acts not only as a neurotransmitter but also as an autacoid.

* 本報告は *Neuroscience Letters*, 104 (1989) 336—339 に発表.