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Author	河村, 美奈(Kawamura, Mina) 大橋, 文人(Ohashi, Fumihito) 永田, 佳子(Nagata, Yoshiko) 高井, 信治(Takai, Nobuharu) 本家, 弘之(Motoie, Hiroyuki) 西村, 亮平(Nishimura, Ryohei) 佐々木, 伸雄(Sasaki, Nobuo) 竹内, 啓(Takeuchi, Akira)
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**Isolation and identification of canine plasma components  
suspected as uremic toxins\***

Mina KAWAMURA\*\*, Fumihito OHASHI\*\*\*, Yoshiko NAGATA, Nobuharu TAKAI\*\*\*\*,  
Hiroyuki MOTOIE\*\*, Ryohei NISHIMURA\*\*, Nobuo SASAKI\*\*  
and Akira TAKEUCHI\*\*

河村美奈\*\*, 大橋文人\*\*\*, 永田佳子, 高井信治\*\*\*\*, 本家弘之\*\*,  
西村亮平\*\*, 佐々木伸雄\*\*, 竹内 啓\*\*

Four peaks in the chromatograms of sera were found to be significantly correlated to serum creatinine concentrations in uremic dogs. The suspected uremic substances were isolated by two stages of preparative liquid chromatography (PLC) from plasma of uremic dogs treated with the ligation of the ureter. The primary separation of the suspected uremic peaks were performed with anion exchange resin. Analytical reversed phase HPLC showed that three of the 4 peaks consisted of single substances. Main subfractions of these peaks were successfully isolated by the secondary stage reversed phase PLC. By means of thin layer chromatography, UV and <sup>1</sup>H-NMR spectroscopy, components of the four main peaks were confirmed to be small molecules such as a pyridine derivative, uric acid, hippuric acid and kynurenic acid.

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\*\* 東京大学農学部  
\*\*\* 大阪府立大学  
\*\*\*\* 東京大学生産技術研究所