

Effects of Nonylphenol on Brain Gene Expression Profiles in F1 Generation Rats¹

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Objective To explore the effects of nonylphenol on brain gene expression profiles in F1 generation rats by microarray technique. **Methods** mRNA was extracted from the brain of 2-day old F1 generation male rats whose F0 female generation was either exposed to nonylphenol or free from nonylphenol exposure, and then it was reversely transcribed to cDNA labeled with cy5 and cy3 fluorescence. Subsequently, cDNA probes were hybridized to two BiostarR-40S cDNA gene chips and fluorescent signals of cy5 and cy3 were scanned and analyzed. **Results** Two genes were differentially down-regulated. **Conclusion** Nonylphenol may disturb the neuroendocrine function of male rats when administered perinatally.

Key words: Nonylphenol; cDNA microarray; Brain tissue

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