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UNIVERSITET

Molecular Biotechnology Programme

Uppsala University School of Engineering

UPTEC X 05 036	Date of issue 2005-06	
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Title (English) Correlations between mRNA expression of neurotransmitter receptors in the brain and alcohol self-administration in rats		
Title (Swedish)		
Abstract In this thesis it was investigated whether there was a correlation between the mRNA expression of neurotransmitter receptors in the brain and self-administration of ethanol in rats. Forty naïve Wistar rats were trained to orally self-administer ethanol during a nine day training period. A high divergence in alcohol consumption was observed over the population. mRNA expression levels of a number of receptors was determined using real-time PCR. Prefrontal cortex (PFC), hippocampus and amygdala were studied, three brain structures that interact with the core regions of the reward pathway and are involved in learning and memory. Several correlations between mRNA expression and number of alcohol deliveries were found, especially in the PFC. In particular, we found correlations between three adrenergic receptor subtypes and alcohol deliveries which could indicate an involvement of stress in the choice to self-administer.		
Keywords Ethanol, self-administration, Neurotransmitter receptors, Real-time RT-PCR		
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Project name	Sponsors	
Language English	Security	
ISSN 1401-2138	Classification	
Supplementary bibliographical information	Pages 29	
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