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Molecular Biotechnology Programme

Uppsala University School of Engineering

UPTEC X 05 044	Date of issue 2005-08	
Author	Greta Hultqvist	
Title (English)	Binding site of arachidonic acid derivatives on glycine transporters	
Title (Swedish)		
Abstract	<p>The arachidonic acid derivative, N-Arachidonyl glycine (NAG), was recently found to be an inhibitor of the glycine transporter GlyT2a but does not interact with the GlyT1b transporter. Previously arachidonic acid and anandamide have been shown to have effects on the GlyT1b transporter but not the GlyT2a transporter. The binding site of these compounds on the glycine transporters was studied by expressing mutated transporters in <i>X. laevis</i> oocytes and measuring the activity of the transporters using the 2- electrode voltage clamp technique. It was found that amino acid 532, predicted to be located in an extracellular loop in GlyT2a, probably is not involved in the binding of NAG, but that further experiments, such as for example to produce a chimera between the GlyT2a and GlyT1b, needs to be performed to increase the understanding for these important transporters.</p>	
Keywords	Glycine, Glycine transporters, arachidonic acid, anandamide, N-arichidonyl glycine, N-arichidonyl- L- alanine	
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Project name	Sponsors	
Language	Security	
ISSN 1401-2138	Classification	
Supplementary bibliographical information	Pages	
	24	
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