



Molecular Biotechnology Programme
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Author	Helena Persson	
Title (English)	Hydrazine toxicity in rat hepatocytes studied by proteome analysis	
Title (Swedish)		
Abstract	<p>Hydrazine (HY) is a hepatotoxin. It has been shown to affect numerous crucial cellular processes. Here, the mechanism behind the toxicity of HY was investigated by proteomic technologies. Rat hepatocytes were isolated and incubated with various concentrations of HY (0, 1, 5, 10 mM) for 24 hours. The proteins were extracted from the cells and separated by two-dimensional (2-D) gel electrophoresis. The 2-D gel patterns were compared to each other. 62 proteins were found with altered expression upon stimulation with HY. Three of these were successfully identified as Erp29, transthyretin and thioredoxin peroxidase using mass spectrometry or matching. The exact role of these three proteins in HY hepatotoxicity remains to be elucidated.</p>	
Keywords	Hydrazine, proteomics, 2-D gel electrophoresis, mass spectrometry, primary hepatocytes	
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