

**ACTIVITY AND EXPRESSION OF ECTO-5'-NUCLEOTIDASE/CD73 ARE INCREASED DURING PHENOTYPE CONVERSION OF A HEPATIC STELLATE CELL LINE**

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Hepatic stellate cells play a crucial role in the development of liver fibrosis. Adenosine acts as an extracellular signaling molecule in various tissues and in liver this nucleoside exerts protective effects. Ecto-5'-nucleotidase/CD73 (CD73) is a key enzyme in the generation of adenosine in the extracellular medium, by transforming AMP into adenosine. We compared the extracellular metabolism of AMP and transcriptional levels of the CD73 and tissue nonspecific alkaline phosphatase (TNALP), in two phenotypes of mouse hepatic stellate cell line GRX. We found that the phenotype conversion from myofibroblasts to lipocytes, with retinol or indomethacin, enhanced CD73 activity and up regulated its mRNA expression. The phenotype conversion mediated by retinol also involves transcriptional activation of TNALP. The AMP hydrolysis in lipocytes is higher than in myofibroblast, followed by adenosine increase in extracellular medium. Our results suggest that CD73 is the main enzyme responsible for the production of adenosine in lipocytes, suggesting that this enzyme may play a role in the regulation of adenosine-mediated lipocytes functions. Supported by CNPq, PROPESQ-UFRGS.