HepG2 Expression of miR-202 and TRIB-1 under Metabolic and Inflammatory Stress

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of these, a few of them like miR-130, miR-24, miR-122, miR-30c and miR-33 have been identified as important regulators of lipid metabolism [12-17].

In a previous study, it’s been discovered that miR-202 can bind to

miR202 is expressed in HepG2 cells under conditions of metabolic and inflammatory stress. miRNA was isolated from HepG2 cells stimulated with IL-1β and cultured in 48 hours of high glucose and cDNA was synthesized using a miR-202 stem-loop specific primer. Expression levels of miR-202 were quantified using real-time PCR and analysed using one-way ANOVA followed by Dunnett's multiple comparison test comparing all treated samples to the control.

Effects of endogenous miR-202 expression on the Trib-1 level: To study the relationship between miR-202 and Trib-1 under these cell type conditions, we also measured the mRNA levels of Trib-1 in these cell samples stimulated with IL-1β and exposed to 48 hours of high glucose. Compared to the control, the Trib-1 level was significantly

As much as it was not inversely proportional to miR-202 expression, it is almost similar to results obtained from in vivo studies were hyperlipidaemic conditions are associated with reduced levels of Trib-1 [2], even though this study only quantifies Trib-1 mRNA levels. Interestingly this could serve as an in vitro verification of

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