Alteration in the gene expression of the HepG2 cell line by exposure to particulate matter (PM) of diesel [

2022

text (article)

Analítica

Particulate matter (PM) less than 2.5 um emitted by diesel engines is responsible for the morbidity and mortality associated with air pollution. Alternative fuels have been implemented, but their potential toxic effects are still unknown. The objective of this article is to evaluate the in vitro toxicity of the organic extract of particulate matter emitted by a diesel engine powered by two different fuels. Following cell exposure to fossil diesel + 10% ethanol and fossil diesel extracts, mutagenicity, genotoxicity, and differential gene expression were evaluated. The results showed that the organic extracts of diesel PM + 10% ethanol were more biotoxic ($p<0.05$). More studies are needed to better understand the health effect of PM emissions from biofuel
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