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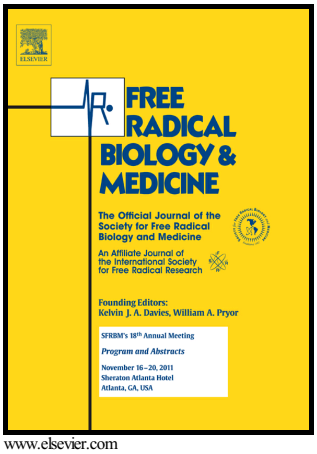

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Loss of C/EBPδ enhances IR-induced cell death by promoting oxidative stress and mitochondrial dysfunction

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Abstract

Exposure of cells to ionizing radiation (IR) generates reactive oxygen species (ROS). This results in increased oxidative stress and DNA double strand breaks (DSBs) which are the two underlying mechanisms by which IR causes cell/tissue injury. Cells that are deficient or impaired in the cellular antioxidant response are susceptible to IR-induced apoptosis. The transcription factor CCAAT enhancer binding protein delta (Cebpd, C/EBPδ) has been implicated in the regulation of oxidative stress, DNA