



Puerarin Inhibits Oxidative Stress-Induced Cardiac H9c2 Cell Injury Through Suppressing SAPK/JNK Activation

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SUMMARY. Puerarin is isolated from a traditional Chinese medicine *Radix Puerariae* and has been widely used for the treatment of cardiovascular and cerebral diseases. However, the precise mechanism of puerarin on oxidative stress-induced cardiac H9c2 cells mitochondrial injury remains unclear. In this work, we examined the protective mechanism of puerarin on oxidative stress-induced cardiac H9c2 cells injury by several methods such as confocal microscopy technique, western blotting and MTT assay. Our results further indicate that puerarin prevents oxidative stress-induced cardiac H9c2 cells mitochondrial injury by negatively regulating SAPK/JNK kinases activity.

RESUMEN. Puerarina se aísla de la medicina tradicional china *Radix Puerariae* y ha sido ampliamente utilizada para el tratamiento de enfermedades cardiovasculares y cerebrales. Sin embargo, el mecanismo exacto de puerarina en células H9c2 cardíaca inducida por el estrés oxidativo mitocondrial sigue siendo poco clara. En este trabajo se analizó el mecanismo de protección de puerarina en lesiones células H9c2 cardíaca inducida por el estrés oxidativo por varios métodos, como técnica de microscopía confocal, Western Blot y ensayo MTT. Nuestros resultados indican además que puerarina impide el estrés oxidativo de células cardíacas H9c2 inducido por el lesión mitocondrial, regulando negativamente la actividad de las kinasas SAPK/JNK.

KEY WORDS: Puerarin, SAPK/JNK, mPTP, Oxidative stress, Reactive oxygen species

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