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*Basic Study*

**L-carnitine protects C2C12 cells against mitochondrial superoxide overproduction and cell death.**

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### Abstract

Associated with its physiological function, a muscle cell metabolism is highly dependent on oxygen and may produce reactive oxygen species (ROS), especially

### Match Overview

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## Neuroprotective Effects of Acetyl-L-Carnitine Against Oxygen-Glucose ...

[www.ncbi.nlm.nih.gov/pubmed/26643543](http://www.ncbi.nlm.nih.gov/pubmed/26643543) ▾ [翻译此页](#)作者: SW Bak - 2015 - [相关文章](#)

2015年12月8日 - Neuroprotective Effects of Acetyl-L-Carnitine Against Oxygen-Glucose Deprivation-Induced Neural Stem Cell Death. ... Acetyl-L-carnitine (ALCAR) plays an important role in mitochondrial metabolism and in ... ALCAR protected NSCs against OGD by reducing apoptosis and restoring proliferation.

缺少字词: c2c12 superoxide overproduction

## Biochemical dysfunction in heart mitochondria exposed to ischaemia ...

[www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov) > NCBI > Literature > PubMed Central (PMC) ▾ [翻译此页](#)作者: G Solaini - 2005 - 被引用次数: 197 - [相关文章](#)

2005年8月23日 - Like many cells, when deprived of oxygen (anoxia), cardiac cells can ... by mitochondrial and sarcoplasmic SODs (superoxide dismutases) and related enzymes [15]. .... Cell death may be due to either necrosis or apoptosis, although, ..... to protect against cell death in ischaemia/reperfusion [196–198].

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2015年7月6日 - protecting TNF- $\alpha$ -induced C2C12 cells against oxidative damage and mitochondrial. 23 ... Overproduction of ROS in organisms can cause oxidative stress, a pathophysiological ... poly- $\alpha$ -L-guluronate (PG) poly- $\beta$ -D-mannuronate (PM) and heteropolymeric ... mitochondrial dysfunction and

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2005年8月23日 - Cell death may be due to either necrosis or apoptosis, although, using ..... and subsequent reperfusion can result in toxic ROS overproduction that ... is believed to protect mitochondria against such damage to some ..... Kinnula V. L., Crapo J. D. Superoxide dismutases in malignant cells and human tumors.

### Melatonin protects against apoptotic and autophagic cell death in ...

[www.ncbi.nlm.nih.gov/pubmed/21138475](http://www.ncbi.nlm.nih.gov/pubmed/21138475) ▼ [翻译此页](#)

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2010年12月8日 - Melatonin protects against apoptotic and autophagic cell death in C2C12 ... Expression of catalase and Mn-superoxide dismutase (SOD) was elevated ... or not melatonin may restrain autophagic cell death in C2C12 cells.

缺少字词: † carnitine mitochondrial overproduction

### Low molecular weight guluronate prevents TNF- $\alpha$ -induced oxidative ...

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2005年8月23日 - Two forms of mitochondria have been recognized in heart cells on the basis of ... followed by cell death [4], which can be measured in beating heart ... the overproduction of ROS on reperfusion as a source of cell damage [45], and ..... [123] found that rat ventricular myocytes in culture were protected by NO ...

缺少字词: c2c12

### Ischaemic accumulation of succinate controls reperfusion injury ... - NCBI

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4255242/> - 翻译此页

作者: ET Chouchani - 2014 - 被引用次数: 211 - 相关文章

2014年11月5日 - Elevating succinate in C2C12 mouse myoblast cells with dimethyl succinate ... Furthermore, the activity of the mitochondrial superoxide-sensitive CAC ... 2f) and its oxidation upon reperfusion, it should protect against IR injury in vivo. .... with 1mM 1-<sup>13</sup>C L-aspartic acid, followed by 30 min global ischaemia.

### Low molecular weight guluronate prevents TNF-α-induced oxidative ...