Localization in Cells and NADPH Oxidase Activity in Glucose Induced Cytotoxicity on rat Muscle Cell Line

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PRIMARY SOURCES

1	Basu, Sujata, Mamta Pant, and R. Rachana. "Protective effect of Salacia oblonga against tobacco smoke-induced DNA damage and cellular changes in pancreatic β-cells", Pharmaceutical Biology, 2015. Crossref	126 words	5%
2	portal.elseviermed.cn Internet	57 words	2%
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6	Wang, X.. "Double antioxidant activities of rosiglitazone against high glucose-induced oxidative stress in hepatocyte", Toxicology in Vitro, 201106 Crossref	40 words	2%
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oblonga on mitochondria in a hyperglycemic state are still unknow
work was to investigate the effects and mechanism of action of *Sal*
and stem) extract on high glucose-induced oxidative stress in L6 (r
cell line. This study gives an insight into the effects of superoxide
due to high glucose on mitochondria through change in fluore
staining cells with nonyl-acridine orange dye.

2. Materials and Methods

2.1 Chemicals and Reagents

DMEM/nutrient mixture F-12 Ham, fetal bovine serum (FBS), a
orange (NAO) were purchased from Sigma Aldrich, India. Trypsi
(4,5-dimethylthiazolyl-2)-2,5-diph[illegible]tetrazolium bromide], and nic
dinucleotide phosphate (NADPH) were purchased from HiMedia L
Limited, India. Dimethyl sulfoxide (DMSO), potassium dihy
(KH_2PO_4), dipotassium hydrogen phosphate (K_2HPO_4), ethylenediami
(EDTA), and Triton X-100 were purchased from Central Drug Hou
India.

2.2 Plant Material

The *Salacia oblonga* powder (root and stem) was purchased from M
Private Limited, Bangalore, India.

2.3 Cell Line and Culture Condition

The L6 (rat skeletal muscle) cell line was purchased from Nation
Science, Pune, India and was cultured by standard method. Whe
assay, confluent monolayers of L6 cells were trypsinized, centrif
suspension thus obtained was used for performing the assays.

2.4 Effect of High Glucose on the Viability of L6 Cells

The L6 cells were seeded at a density of $5x10^4$ cells/well (Dybul
96-well cell culture plate and cultured overnight at 37°C under a hu
atmosphere prior to treatment. The cells were exposed to glucose at
- 75mM for 24 hrs in order to determine its toxic dose for attainin
death. The viability of the cells was determined by measuring spec
the amount of formazan formed due to reduction of yellow M
dehydrogenase inside the cells.

2.5 Effect of Salacia oblonga Extract (SOE) in Glucose-Induced L6 Cells