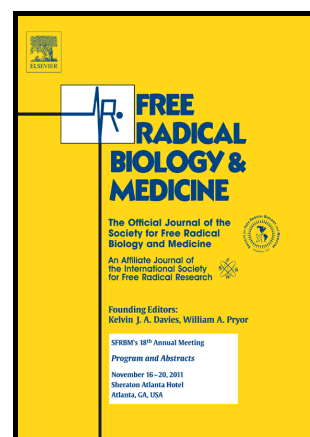


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Oxidative stress induces mitotic arrest by inhibiting Aurora A-involved mitotic spindle formation

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Abbreviations: CIN, chromosomal instability; CKIs, CDK inhibitors; DDC, sodium diethyldithiocarbamate trihydrate; GSK-3, glycogen synthase kinase 3; NAC, N-acetyl-L-cysteine; PCM, pericentriolar material; PCNT, pericentrin; ROS, reactive oxygen species; SAC, spindle assembly checkpoint; SOD, superoxide dismutase; TPX2, Target Protein for *Xenopus* kinesin-like protein 2

Highlights:

- Exogenous and endogenous ROS both induce mitotic arrest.
- ROS result in delayed formation and abnormal function of the mitotic spindle.
- Aurora A is hyperphosphorylated in early mitosis under oxidative stress.
- The centrosomal localization of Aurora A is not affected by hyperphosphorylation.

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