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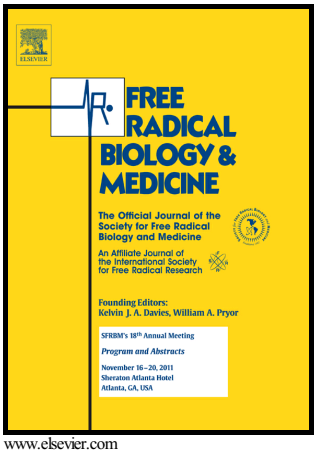

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PII: S0891-5849(16)31132-7
DOI: http://dx.doi.org/10.1016/j.freeradbiomed.2016.12.031
Reference: FRB13137

To appear in: *Free Radical Biology and Medicine*

Received date: 14 October 2016
Revised date: 5 December 2016
Accepted date: 21 December 2016

Cite this article as: Guang-Fei Wang, Qincai Dong, Yuanyuan Bai, Jing Yuan, Quanbin Xu, Cheng Cao and Xuan Liu, Oxidative stress induces mitotic arrest b inhibiting Aurora A-involved mitotic spindle formation, *Free Radical Biolog and Medicine,* http://dx.doi.org/10.1016/j.freeradbiomed.2016.12.031

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.