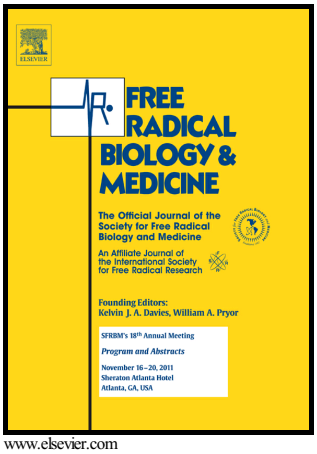

www.elsevier.com

Mechanism of Synergistic DNA Damage induced by the Hydroquinone Metabolite of Brominated Phenolic Environmental Pollutants and Cu(II): Formation of DNA-Cu Complex and Site-specific Production of Hydroxyl Radicals

Bo Shao, Li Mao, Na Qu, Ya-Fen Wang, Hui-Ying Gao, Feng Li, Li Qin, Jie Shao, Chun-Hua Huang, Dan Xu, Lin-Na Xie, Chen Shen, Xiang Zhou, Ben-Zhan Zhu

PII: S0891-5849(16)31152-2
DOI: http://dx.doi.org/10.1016/j.freeradbiomed.2016.12.050
Reference: FRB13156

To appear in: *Free Radical Biology and Medicine*

Received date: 11 July 2016
Revised date: 30 December 2016
Accepted date: 31 December 2016

Cite this article as: Bo Shao, Li Mao, Na Qu, Ya-Fen Wang, Hui-Ying Gao, Feng Li, Li Qin, Jie Shao, Chun-Hua Huang, Dan Xu, Lin-Na Xie, Chen Shen Xiang Zhou and Ben-Zhan Zhu, Mechanism of Synergistic DNA Damage induced by the Hydroquinone Metabolite of Brominated Phenolic Environmental Pollutants and Cu(II): Formation of DNA-Cu Complex and Site-specific Production of Hydroxyl Radicals, *Free Radical Biology and Medicine* http://dx.doi.org/10.1016/j.freeradbiomed.2016.12.050

Mechanism of Synergistic DNA Damage induced by the Hydroquinone Metabolite of Brominated Phenolic Environmental Pollutants and Cu(II): Formation of DNA-Cu Complex and Site-specific Production of Hydroxyl Radicals

Bo Shao[a,b], Li Mao[a], Na Qu[a], Ya-Fen Wang[c], Hui-Ying Gao[a], Feng Li[a], Li Qin[a], Jie Shao[a], Chun-Hua Huang[a], Dan Xu[a], Lin-Na Xie[a], Chen Shen[a], Xiang Zhou[c] and Ben-Zhan Zhu[a,*]

[a]State Key Laboratory of Environmental Chemistry and Ecotoxicology, Research Center for Eco-Environmental Sciences and University of Chinese Academy of Sciences, The Chinese Academy of Sciences, Beijing, P. R. China 100085

[b]School of Public Health, Jining Medical University, Jining, Shandong, P. R. China 272067

[c]College of Chemistry and Molecular Sciences, Key Laboratory of Biomedical Polymers of Ministry of Education, Wuhan University, Wuhan, Hubei, P. R. China 430072

[*]Correspondence to: E-mail: bzhu@rcees.ac.cn

[*]***Addresses for Correspondence:***

Ben-Zhan (Benny) Zhu, Ph.D.
Professor of Chemistry and Toxicology
State Key Laboratory of Environmental Chemistry and Ecotoxicology
Research Center for Eco-Environmental Sciences
The Chinese Academy of Sciences
P.O. Box 2871
Beijing, P. R. China 100085

Phone: 86-10-62849030
Fax: 86-10-62923563