

***Dendrobium huoshanense* can reduce hydrogen peroxide-induced toxicity in SH-SY5Y cells**

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Dendrobium huoshanense, an herb of Orchidaceae family, has long been used as traditional Chinese medicine for the protection of eye, stomach and liver. A recent study has shown that *Dendrobium huoshanense* can help prevent selenium-induced liver injury and fibrosis in rats. Moreover, this herb has been found to scavenge free oxygen radicals and inhibit nitric oxide generation, exerting antioxidative functions. In the present study, we aim to investigate the neuroprotective effects of *Dendrobium huoshanense* against oxidative stress which has been implicated in many neurological diseases such as ischemia, Alzheimer's disease and Parkinson's disease. Undifferentiated SH-SY5Y cells were pretreated with chemically extracted *Dendrobium huoshanense* for 24 hours. After removing *Dendrobium huoshanense* from the cells, they were treated with hydrogen peroxide for 18 hours. Results indicated that pretreatment of *Dendrobium huoshanense* can reduce the release of lactate dehydrogenase from SH-SY5Y cells in hydrogen peroxide-induced toxicity, implicating that *Dendrobium huoshanense* may help in neuroprotection.