Inhibition of proliferation and induction of apoptosis by *Siegesbeckia glabrescens* in HepG2 cells.

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Siegesbeckia glabrescens (SG) is derived from has been used as a herabl plant. In the previous study, we have been reported to elicit vasodilatory effects. In the present study, we examined the involvement of nitric oxide (NO) on anti-proliferative and apoptosis-inducing activity of SG in HepG2 cells, a human hepatoma cell line. SG showed potent cytotoxic activity in HepG2 cells following incubation for 24 and 48hrs. Also, NO was produced by CB dose-dependently. Induction of apoptosis was observed by DNA fragmentation and Hochest staining. Treatment of HepG2 cells with SG resulted in the activation of caspase-3 protease. L-NNA treatment recovered cytotoxic effect on HepG2 cell line and also inhibited the caspase-3 activation by SG. These results suggest that SG is potentially useful as a chemotherapeutic/chemoprevetive agent in hepatocellular carcinoma.