Inotilone inhibited inflammatory effects from *Phellinus linteus in vitro and in vivo*

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Inotilone was isolated from *Phellinus linteus.* The anti-inflammatory effects of inotilone was studies by using lipopolysaccharide (LPS)-stimulated mouse macrophage RAW264.7 cells and λ-carrageenan (Carr)-induced hind mouse paw edema model. Inotilone was tested in the inhibitor of mitogen activated protein kinase (MAPK) [extracellular signal-regulated protein kinase, c-Jun NH_2-terminal kinase, p38], and nuclear factor-κB (NF-κB), matrix-metalloproteinase (MMP)-9 protein expressions in LPS-stimulated RAW264.7 cells. *In vivo* test, inotilone decreased the paw edema at the 4^{th} and the 5^{th} h after Carr administration, and it increased the activities of catalase (CAT), superoxide dismutase (SOD), and glutathione peroxidase (GPx). The anti-inflammatory activities of inotilone might be related to decrease the levels of MDA, iNOS, COX-2, NF-κB, and MMP-9 and increase the activities of CAT, SOD, and GPx in the paw edema through the suppression of TNF-α and NO. This study presents the potential utilization of inotilone, as a lead for the development of anti-inflammatory drug (NSC100-2313-B-039-004-).