Penandaan falerin dengan iodium - 131 dan Uji Biodistribusi pada mencit yang diinduksi inflamasi

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Abstrak

Phalerin is an active component of mahkota dewa (Phaleria macrocarpa (scheff.) Boerl) proven to have an anti inflamation effect. The labeling of phalerin with gamma emiting radionuclides was aimed to study is pharmacokinetic behavior and particularly to trace its metabolites. The labeling with I was caried our using iodogen as oxidator. Radiolabeled compound was characterized by high performance liquid choromatography (HPLC) using C-18 column eluted with methanol 70% and detected with UV detector (z=291 nm) and by thin layer chromatography (TLC) using silica gel strips eluted with chloroform - methanol (9:2), and lebeling efficiency was determined using the same TLC system. Purification of radiolabeled product was carried out using size exclusion chromatography (Sephadex G-25 column) eluted with 0.05 M phosphate buffer pH 7.4 Biodistributions of I-phalerin in various organs of normal and inflammation - induced mice were observed at 1,4 and 24 hours post-intravenous injection. radiochemical purity of I-phalerin was 90.2 krang lebih 2.8% and increased to 96.0 krang lebih0,4% after purification. Radioactivities in inflamed tissue at 1,4 and 24 hours post injection were respectively 1.6 times, 1,4 times and 1.3 times higher than that in normal tissue. The results showed a significant uptake of radiolabeled phalerin in inflamed.