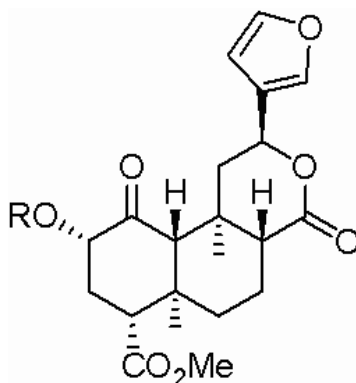


## P-076: SALVINORIN B AS A UNIVERSAL SYNTHON IN THE SYNTHESIS OF NEW SALVINORIN A ANALOGS

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Salvinorin A (**1**) is a neoclerodane diterpene with strong hallucinogenic activity. It has been shown to have a high affinity and selectivity to kappa-opioid receptor (KOR). It is the only known non-nitrogenous KOR agonist. Salvinorin A, a major secondary metabolite of *Salvia divinorum*, is an attractive lead compound for drug development due to its strong effects on human mood and low toxicity. In the last two years, numerous derivatives and analogs of salvinorin A have been synthesized and show a broad range of KOR affinities. Several derivatives, including the thio-analogs, displayed affinity comparable to the natural product, and may be potentially useful as biochemical probes for the KOR receptor. We now report an efficient transformation of salvinorin B (**2**) to 2 $\beta$ -chlorosalvinorin B, an intermediate for the synthesis of analogs with 2 $\alpha$ -configuration. We have found also salvinorin B triflate as a good precursor for epimeric analogs with 2 $\beta$ -configuration. We synthesized several epimeric analogs of salvinorin A using both developed methods. To our knowledge the direct conversion of triflates to thio-derivatives have not been reported in the literature.



**1** R = Ac, Salvinorin A

**2** R = H, Salvinorin B