PREPARASI SENYAWA 4-METOKSIBENZOIL SALISILAMIDA DAN UJI AKTIVITAS ANALGESIK PADA MENCIT (*Mus musculus*)

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## ABSTRACT

To develop the new drug of NSAID group, preparation of 4-methoxybenzoyl salicylamide had been done by reaction of salicylamide and 4-methoxybenzoyl chloride, based on Schotten-Baumann method. The yield percentage from the preparation of 4-methoxybenzoyl salicylamide was 65 % and its melting point was 183-187$_{o}$C. The compound was identified by using the spectrophotometric data of infra-red, ultra-violet and also the $_{1}$H-nuclear magnetic resonance spectrophotometric.
The analgesic activity was tested using the writhing test method. The result showed that in dose of 25 mg/kg mice body weight, the pain inhibition percentage was 64,08%, in dose of 50 mg/kg mice body weight, the pain inhibition percentage was 81,22%, in dose of 100 mg/kg mice body weight, the pain inhibition percentage was 91,17%, with the $ED_{50}$ was around 11,463 mg/Kg mice body weight. However the standard compound salicylamide shown in dose of 25 mg/kg mice body weight, the pain inhibition percentage was 16,58%, in dose of 50 mg/kg mice body weight, the pain inhibition percentage was 39,71%, in dose of 100 mg/kg mice body weight, the pain inhibition percentage was 56,36%, with the $ED_{50}$ was around 77,165 mg/Kg mice body weight. The result from the analgesic activity test for this new compound shows that this new compound has better analgesic activity than salicylamide.

Keywords : preparation, 4-methoxybenzoyl salicylamide, writhing test, analgesic activity.