SKRIPSI

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STUDI HUBUNGAN ANTARA NILAI LIPOFILITAS (Σf) TURUNAN *N*-BENZOILSEFALEKSIN DENGAN AKTIVITAS ANTIBAKTERI TERHADAP *Staphylococcus aureus* ATCC 25923

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
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Lembar Pengesahan

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ABSTRACT

A Relationship Study Between Lipophylicity Parameter of *N*-benzoilcephalexin Derivates With Their Antibacterial Activity Against *Staphylococcus aureus* ATCC 25923

This research was done to understand relationship between lipophilicity parameter of *N*-benzoilcephelexin derivatives with their antibacterial activity againts *Staphylococcus aureus* ATCC 25923. Lipophilicity parameter that was chosen is "sigma Rekker (Σf)" and antibacterial activity test was done with cylinder diffusion metliod. The relationship between lipophilicity parameters of *N*-benzoilcephelexin derivatives with their antibacterial activity againts *Staphylococcus aureus* ATCC 25923 was explained with linier regression. The result is Log DDH = -0,060 Σf + 1,306(r^2 = 0,126; r = 0,354; F = 0,431; n= 5; r_{table} (α = 0,05; dF = 3) = 0,8783; F_{table} (1;3;0,05)= 10,13). From the result, it could be concluded that lipophilicity parameters didn't influence antibacterial activity *N*-benzoilcephalexin's generation against *Staphylococcus aureus* ATCC 25923.

Key word: *lipophilicity parameters, sigma Rekker (Σf), cylinder diffusion method, N-benzoilcephalexin, Staphylococcus aureus*