# Sintesis 2-(4-hidroksibenzilidena)-6-(4'-sulfonamidabenzilidena)sikloheksanon dari 2-(4-hidorksibenzilidena)-6-benzilidenasikloheksanon, asam klirosulfonat, dan ammonia

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Abstrak

Senyawa 2-(4-Hidroksibenzilidena)-6-(4'-sulfonamidabenzilidena) sikloheksanon adalah senyawa karbonil , tidak jenuh yang termasuk dalam turunan 2,6- dibenzilidenasikloheksanon. Senyawa 2,6-dibenzilidenasikloheksanon telah terbukti mempunyai aktivitas anti-inflamasi meskipun aktivitasnya masih rendah. Dalam rangka meningkatkan aktivitas anti-inflamasi maka disintesis senyawa 2-(4-Hidroksi benzilidena)-6-(4'-sulfonamidabenzilidena)sikloheksanon. Senyawa 2-(4-Hidroksi benzilidena)-6-(4'-sulfonamidabenzilidena)sikloheksanon ini disintesis melalui dua tahap. Tahap pertama adalah mereaksikan 2-benzilidenasikloheksanon dengan phidroksibenzaldehida dalam suasana asam.
Hasil sintesis ini direaksikan dengan asam klorosulfonat, kemudian produk sulfonil klorida yang dihasilkan segera direaksikan dengan ammonia. Sintesis menghasilkan rendemen sebanyak 27,54 %. Elusidasi struktur dilakukan menggunakan spektrofotometri infra merah dan spektrometri 1H-NMR. Berdasarkan data spektrum infra merah menunjukkan sudah tedapat gugus sulfonamida, tetapi dari data 1H-NMR masih belum dapat dipastikan apakah sudah terbentuk senyawa yang diharapkan.
<hr>2-(4-Hydroxybenzylidene)-6-(4'-sulfonamidabenzylidene)cyclohexanone is an , unsaturated carbonyl compound, which is derivate 0f 2,6-dibenzilidenecylohexanone. 2,6- dibenzilidenecylohexanone are proved to have anti-inflammatory activity, although in little value. In order to increased anti-inflamatory activy, was synthesized 2-(4-Hydroxybenzylidene)-6-(4'-sulfonamidobenzylidene)cyclohexanone. 2- (4- Hydroxy benzylidene) -6- (4'-sulfonamida benzylidene)cyclohexanone was synthesized trough two step.
The first step was to synthesis 2-(4-Hydroxybenzilidene)-6-benzylidenecyclo hexanone by reacting 2-benzylidenecyclohexanone with p-hydroxybenzaldehyde in acidic condition. The product of this synthesis was reacted with chlorosulfonic acid, then the sulfonylchloride crude product obtained was reacted with ammonia as fast as possible. Synthesis of 2-(4-Hydroxybenzylidene)-6-(4'-sulfonamidabenzylidene) cyclohexanone was yield 27,54 %. Structure elucidation was performed using infrared and 1H-NMR spectrometry. Infrared spectrum was showed substitution of sulfonamide but 1H-NMR spectrum but from the 1.