

## Synthesis and Some Transformations of 4-(*R*-*o*-Carboranyl)-3-ethoxycarbonyl-3,4-dihydrocoumarines

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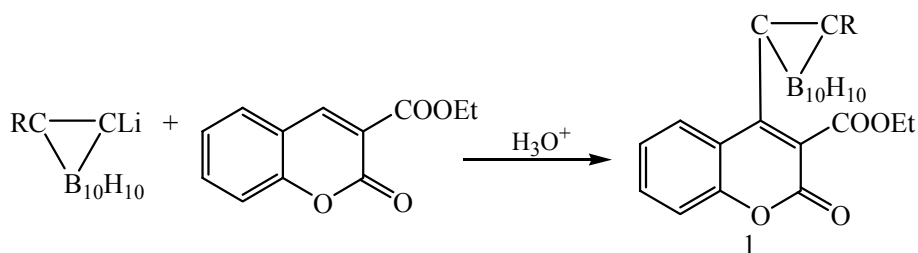
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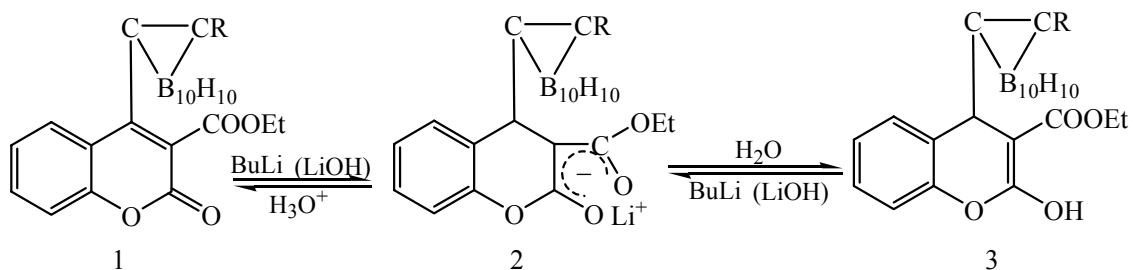
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A scope of compounds possessing biological activity were found among natural and synthetic derivatives. Special place in this series of compounds is taken by carboranyl-containing derivatives of coumarines which are promising precursors in the search and development of new pharmacologically active compounds with a wide spectrum of activity. In this regard, this work was conducted to synthesize carboranyl-containing dihydrocoumarines (1) and to study some of their transformations.



Dihydrocoumarines (1) were found to form lithium enolate-anions (2) at high yields when treated with equimolar amount of BuLi in benzene or LiOH in THF. Lithium enolate-anions transformed qualitatively to dihydrocoumarines (1) when treated with diluted HCl; and to benzo-4H-pyranes (3) when treated with water.



The structures of the compounds synthesized (1-3) were confirmed by IR-, NMR<sup>1</sup>H-spectral data and chemical transformations.