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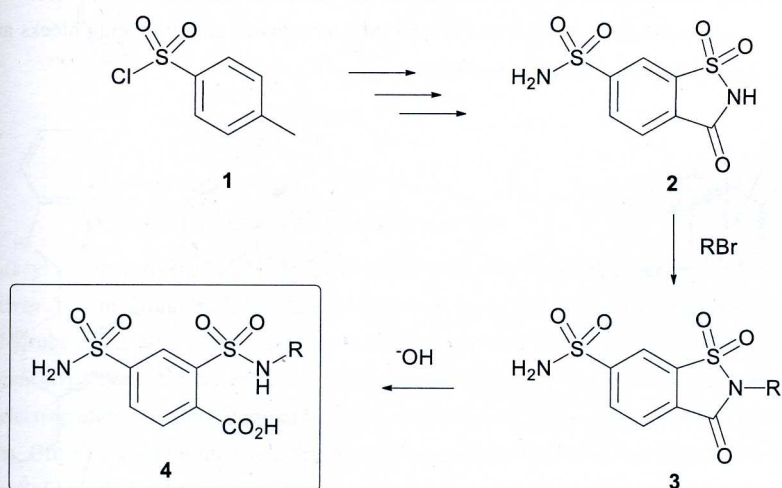
DISULFAMOYL BENZOIC ACID DERIVATIVES

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In a search for new zinc binding groups as potential inhibitors of zinc containing enzymes Carbonic anhydrases (CAs), we focused our attention on saccharin derivatives because of saccharin's promising ability to inhibit tumor associated isoform of carbonic anhydrase CA IX [1].

The aim of this project was to synthesize a series of 2-alkyl-6-sulfamoylsaccharins **3** [2] and carry out their hydrolysis reaction in order to prepare unsymmetrically substituted disulfamoylbenzoic acid derivatives **4** and determine their CA inhibitory activity.



References:

1. Rami, M., Winum, J.-Y., Innocenti, A., Montero, J.-L., Scozzafava, A., Supuran, C. T. *Bioorg. Med. Chem. Lett.*, **2008**, 18, 836.
2. Ivanova, E. M., Simin, E. Yu., Vozny, I. V., Trapencieris, P., Žalubovskis, R. *Chem. Heterocycl. Comp. (Engl. Ed.)*, **2012**, 47(12), 1561.