

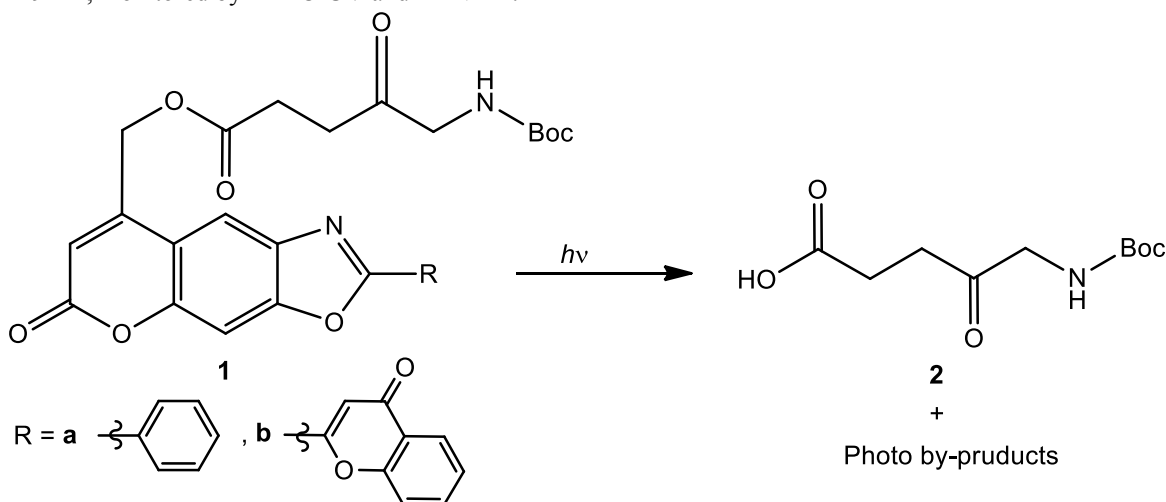
## Photoactivable Oxobenzopyranoxazole Esters of 5-Aminolevulinic Acid

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5-Aminolevulinic acid (ALA) is a metabolic precursor in heme biosynthesis, leading to the formation of hematin and hemin [1]. This small molecule has gained considerable interest in fields such as medicine, cosmetics and agriculture. In medical research, ALA has been used in photodynamic cancer therapy due to its stimulatory effects on the natural photosensitizing agent protoporphyrin IX [2]. The first topical application of ALA in the treatment of basal cell carcinoma was reported in 1990 and, since then, the clinical use of ALA-PDT has steadily grown and the methyl ester of ALA has been approved for the treatment of basal cell carcinoma and actinic keratosis [3,4]. ALA has hydrophilic character and does not penetrate efficiently through the skin or cell membranes, so proper derivatization can enhance its lipophilicity. Considering our research interests, that include the synthesis of fluorescent photocleavable bioconjugates of active molecules based on heterocycles [5-7], in this communication we report the synthesis of new oxobenzopyranoxazoles **1a,b** as photolabile protecting groups and their conjugation with 5-(*N*-butyloxycarbonyl)aminolevulinic acid **2** via an ester bond. The study of the photolytic behaviour of the resulting conjugates in different conditions was carried out in a photochemical reactor by irradiation at 254, 300, 350 and 419 nm, monitored by HPLC-UV and <sup>1</sup>H NMR.



**Scheme 1**

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