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4-(2-Aminoethylamino)-*7H*-benz[*de*]benzimidazo[2,1-*a*]isoquinoline-7-one as a Highly Sensitive Fluorescent Labeling Reagent for Carnitine

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4-(2-Aminoethylamino)-*7H*-benz [*de*] benzimidazo [2,1-*a*] isoquinoline-7-one, synthesized and identified by a HMBC study, can be used as a fluorescent labeling regent for carnitine. The excitation and emission maxima in acetonitrile were observed at λ 454 and 508 nm, respectively. This reagent smoothly reacted with carnitine in the presence of 1-[3-(dimethylamino)propyl]-3-ethylcarbodiimide hydrochloride to afford the corresponding amide under mild conditions. The detection limit (S/N>3) of carnitine was ca. 12 fmol.