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A coumarin-based fluorescent probe for thiols and its application in cell imaging

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Graphical abstract

Abstract

A new coumarin-based fluorescent probe **CAA** containing an acrylamide group has been designed and synthesized for the detection of biothiols. The probe **CAA** shows high selectivity and sensitivity for cysteine (Cys), homocysteine (Hcy), and glutathione (GSH) over other amino acids. A fluorescence turn-on response is induced by a Michael-type reaction. It shows a highly sensitive fluorescence emission to Cys,

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