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ACCEPTED MANUSCRIPT

A fluorescence probe acted on Site I binding for Human Serum

Albumin

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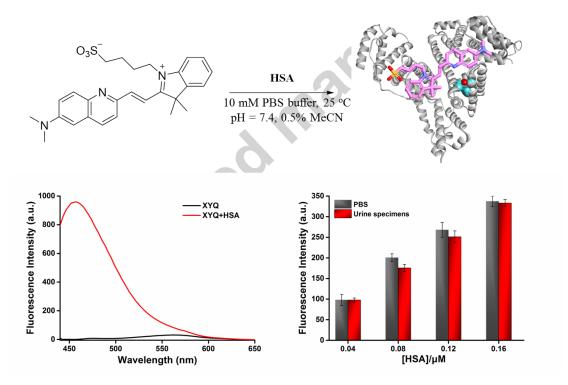
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Abstract

A sensitive turn-on probe XYQ, has been developed for the monitoring of HSA species with highly selective and instantaneous response to real- urine sample and living cells imaging. Furthermore, the fluorescence probe acted on Site I and discrimination of HSA from BSA.

Graphical abstract



We have successfully developed a turn-on (500-fold) fluorescent probe, **XYQ**, for monitoring HSA based on the quinoline ring and indole ring. Research has confirmed that this highly selective and sensitive (LOD 0.0033 g/L) probe has potential capability for monitoring HSA in real-urine sample. To the best of our knowledge, the probe could suitable for distinguishing above HSA from BSA and the study of binding patterns between probe and HSA in comparison with butazodine (Site I) through Docking simulation.

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