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Novel Hepatocyte-Targeting Fluorescent Probes for Detection of Hypochlorous Acid: Synergistic Effect of Phosphate and Galactose

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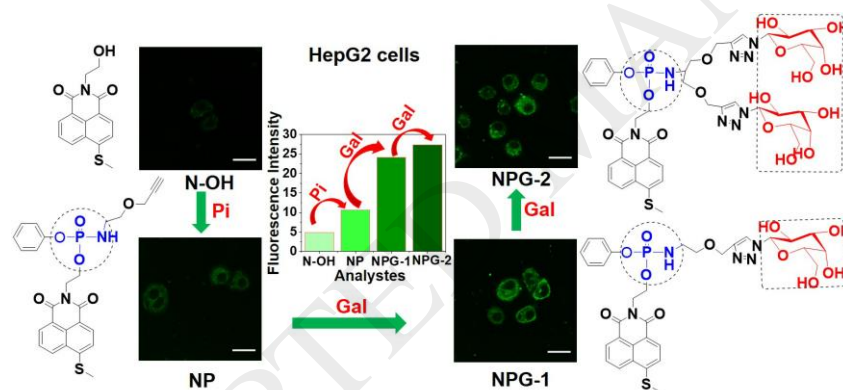
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Graph abstract



Herein we present the design and synthesis of two novel fluorescent probes to detect hypochlorite of hepatocytes in real time. The hepatocyte-targeting capacity follows $N\text{-OH} < NP < NPG\text{-1} < NPG\text{-2}$ trend, showing that phosphate-modification is an efficient hepatocyte-targeting strategy and co-modification with phosphate and galactose groups has synergistic hepatocyte-targeting effect.

Highlight

- Two novel fluorescent probes to detect ClO^- were designed and synthesized.
- Phosphate is an efficient hepatocyte-targeting strategy.
- Phosphate and galactose can synergistically improve hepatocyte-targeting effect.

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