

# Photoredox-mediated Synthesis of $\beta$ -Hydroxydithioacetals from Terminal Alkynes

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## ABSTRACT

A single-step visible light mediated synthesis of  $\alpha$ -hydroxydithioacetals via oxidative coupling of terminal alkynes with thiophenol is reported. Compared to other multistep strategies, this work presents a rare tandem introduction of disulfides and hydroxy group at the  $\beta$ -position in one pot. The reaction is enabled by aerial oxidation, features high efficiency, mild conditions and extendable to both aliphatic and aromatic alkynes.

