Hypervalent lodine for $\alpha, \alpha$-Dihalogenation

## Key words

$\alpha$-halogenation
hypervalent iodine


Significance: Functionalization at the $\alpha$-position of carbonyls represents one of the most versatile and useful types of transformations in organic chemistry. In this paper, the authors describe the use of a hypervalent iodine species to doubly halogenate the $\alpha$-position of esters with either chlorine or fluorine.

Comment: While the chlorination procedure was shown to be broadly functional group tolerant, the need for $\mathrm{BF}_{3} \cdot \mathrm{OEt}_{2}$ in the case of fluorination limits the possible functionality in the starting material. The authors report that substrates with labile moieties such as OMe or NHAc decompose upon heating with $\mathrm{BF}_{3} \cdot \mathrm{OEt}_{2}$.

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[^0]:    SYNFACTS Contributors: Timothy M. Swager, John B. Goods Synfacts 2014, 10(1), $0031 \quad$ Published online: 13.12.2013 DOI: 10.1055/s-0033-1340387; Reg-No.: S14313SF

