

THE GLYCOSYL 8-ALKYNYL NAPHTHOATE DONOR STREAMLINES
THE SYNTHESSES OF CARBOHYDRATESYugen Zhu

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We present a structurally unique and highly effective leaving group, 8-alkynyl naphthoate, which can be efficiently activated under mild gold(I) catalysis. Unlike traditional anomeric ester groups, this ester-type leaving group is base-stable, making it compatible with a wide range of chemical transformations and facilitating the rapid preparation of unprotected ester-type glycosyl donors. Notably, the glycosyl 8-alkynyl naphthoate donor enables the successful execution of challenging glycosylation reactions, including unprotected (or minimally protected) glycosylation, as well as the versatile synthesis of complex phenylethanoid glycosides (Figure 1.).

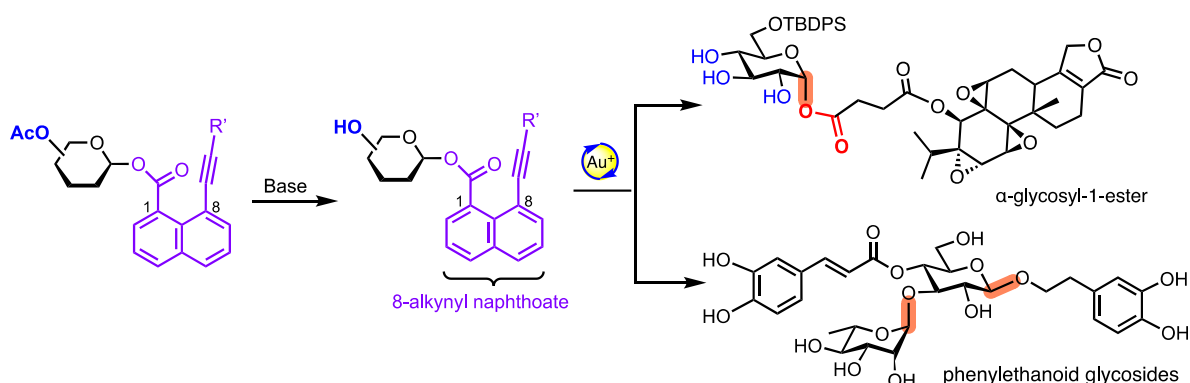


Figure 1. The leaving group of 8-alkynyl naphthoate and its applications.

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