

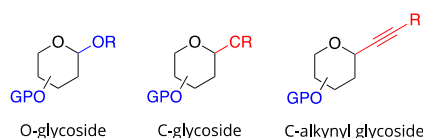
Organo- & MetalloCatalysis towards C-(Alkynyl)-Glycosides



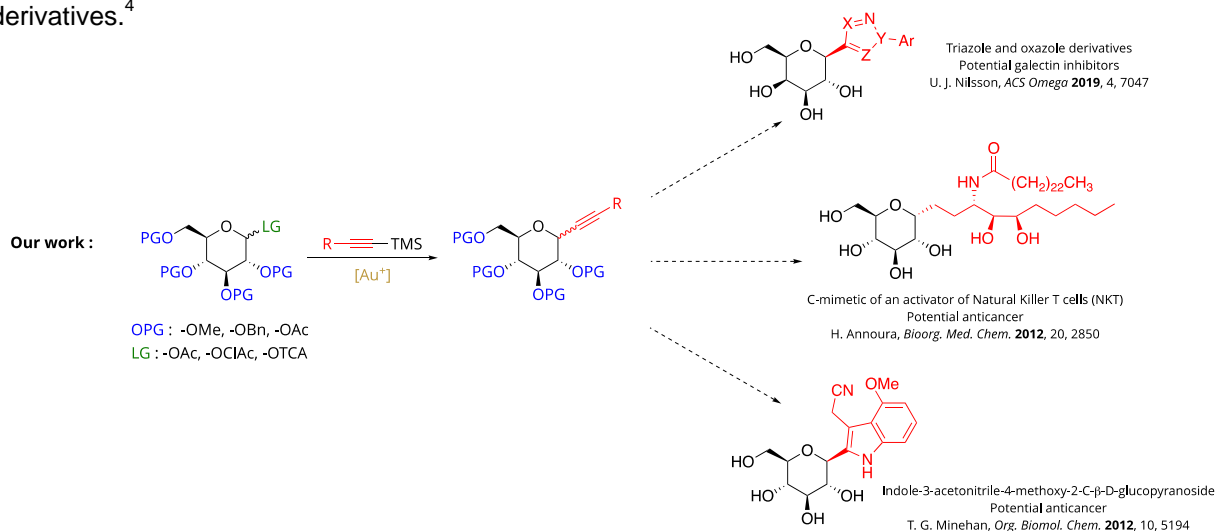
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C-glycosides are analogs to classical O-glycosides in which the labile and hydrolysable C-O acetalic bond at the anomeric position is replaced with a C-C bond. This less reactive and stronger linkage confers C-glycosides interesting properties, especially an increased resistance towards enzymatic (glycosidases) and acidic hydrolysis making these sugars good candidates as bioactive molecules.¹



Among the known C-glycoside building blocks, those alkynylated at the anomeric position offer a unique opportunity to access complex C-glycosides, due to the wide range of known available post-functionalization of the alkyne group.² Various synthetic methods have thus been developed to prepare C-alkynyl glycosides, but most rely on (over)stoichiometric processes.³ Here, we report a catalytic method based both on the use of gold(I) catalysts and of silylated alkynes as starting material. This method is inspired on previous works describing gold(I)-catalyzed alkylation of ketal derivatives.⁴



References

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