Iterative, Orthogonal Strategy for Oligosaccharide Synthesis Based on the Regioselective Glycosylation of Triol Acceptors with Partially Unprotected n-Pentenyl-Orthoesters

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We have studied an iterative protocol based on the regioselective glycosyl coupling of D-mannose triols (*e.g.* **2**) with partially unprotected *n*-pentenyl orthoester glycosyl donors (*e.g.* **1**) (a, Scheme) which, permits the synthesis of linear and branched oligosaccharides with minimal protecting group tampering. In this strategy, the glycosyl donor possesses two orthogonal protecting groups which can be selectively manipulated thus paving the way for regioselective glycosidation strategies (b, c or d, Scheme) leading to linear (b or c, Scheme) or branched (d, Scheme) oligosaccharides.