

## Synthesis of $\beta$ -1,4-Linked Galactan Side-Chains of Rhamnogalacturonan I - DTU Orbit (08/11/2017)

### Synthesis of $\beta$ -1,4-Linked Galactan Side-Chains of Rhamnogalacturonan I

The synthesis of linear- and (1 $\rightarrow$ 6)-branched- $\beta$ -(1 $\rightarrow$ 4)-D-galactans, side chains of the pectic polysaccharide rhamnogalacturonan I is described. The strategy relies on iterative couplings of *n*-pentenyl disaccharides followed by a late stage glycosylation of a common hexasaccharide core. Reaction with a covalent linker and immobilization on NHS-modified glass surfaces allows for the generation of carbohydrate microarrays. The glycan arrays enables the study of protein-carbohydrate interactions in a high throughput fashion, here demonstrated with binding to mAbs and CBMs.

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