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ACCEPTED MANUSCRIPT

Synthesis of cellulose carbamates bearing regioselective substituents at 2,3- and 6-positions for efficient chromatographic enantioseparation

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Highlights:

> Synthesis and chiral recognition of novel cellulose derivatives.
> Novel cellulose derivatives with regioselective substituent at 2,3- and 6-positions.
> Regioselective protection at 2,3-positions using bulky trimethylphenyl group.
> Racemic compounds better resolved on the obtained CSPs than Chiralcel OD.
> Different combination of carbamate substituents influences the chiral recognition.

ABSTRACT

Nine cellulose derivatives bearing two different carbamate substituents at 2,3- and 6-positions of a glucose unit were synthesized by a sequential process based on the regioselective protection at 6-

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