

Title (en)

SOLUTION AND SOLID PHASE SULFOXIDE GLYCOSYLATION: SYNTHESIS OF BETA-LINKED OLIGOSACCHARIDES USING 2-DEOXY-2-N-TRIFLUOROACETAMIDO-GLYCOPYRANOSYL DONORS

Title (de)

LÖSUNG UND FESTPHASENSULFOXIDGLYKOSYLIERUNG: SYNTHESE VON BETA-VERKNÜPFTEN 2-DEOXY-2-N-TRIFLUOROACETAMIDO-GLYCOPYRANOSYL DONOREN

Title (fr)

GLYCOSYLATION DE SULFOXYDE EN SOLUTION ET EN PHASE SOLIDE: SYNTHESE D'OLIGOSACCHARIDES A LIAISON BETA A L'AIDE DE DONNEURS 2-DEOXY-2-N-TRIFLUOROACETAMIDO-GLYCOPYRANOSYLE

Publication

EP 1053471 A1 20001122 (EN)

Application

EP 99905611 A 19990203

Priority

- US 9902180 W 19990203
- US 7357098 P 19980203

Abstract (en)

[origin: WO9939201A1] The invention relates to a process for the synthesis of beta -oligosaccharides. beta -oligosaccharides are synthesized using alkylsulfenyl- or an arylsulfenyl-2-deoxy-2-N-trifluoroacetamidoglycopyranoses as glycosyl donors via the sulfoxide glycosylation, both in solution and solid phases. Once activated under the glycosylation conditions, these donors afford the respective beta -glycosides exclusively and in high yield. Since the trifluoroacetamido group is easily removed under mild conditions, the corresponding amino group can be appropriately derivatized, even in the presence of unprotected hydroxyl groups. Disaccharide libraries are designed, constructed and analyzed. The invention also relates to a process for synthesizing the glycosyl donor.

IPC 1-7

G01N 33/53; G01N 33/566; G01N 33/543; C07G 3/00; C07G 11/00; C07H 1/00; C07H 15/00; C07H 17/00

IPC 8 full level

C07H 15/14 (2006.01); **C07G 3/00** (2006.01); **C07G 11/00** (2006.01); **C07H 5/06** (2006.01); **C07H 5/10** (2006.01); **C07H 15/04** (2006.01);
C07H 15/12 (2006.01); **C07H 15/203** (2006.01); **C07B 61/00** (2006.01)

CPC (source: EP)

C07H 5/10 (2013.01); **C07H 15/12** (2013.01); **C07B 2200/11** (2013.01); **C40B 40/00** (2013.01)

Citation (search report)

See references of WO 9939201A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9939201 A1 19990805; AU 2573699 A 19990816; CA 2319339 A1 19990805; EP 1053471 A1 20001122; JP 2002501932 A 20020122

DOCDB simple family (application)

US 9902180 W 19990203; AU 2573699 A 19990203; CA 2319339 A 19990203; EP 99905611 A 19990203; JP 2000529604 A 19990203