

Title (en)  
PROCESS FOR PRODUCING 2'-O-FUCOSYLLACTOSE

Title (de)  
VERFAHREN ZUR HERSTELLUNG VON 2'-O-FUCOSYLLACTOSE

Title (fr)  
PROCÉDÉ DE PRODUCTION DE 2'-O-FUCOSYLLACTOSE

Publication  
**EP 3411379 A1 20181212 (DE)**

Application  
**EP 17703388 A 20170202**

Priority  
• EP 16154115 A 20160203  
• EP 2017052280 W 20170202

Abstract (en)  
[origin: WO2017134176A1] The present invention relates to a process for producing 2'-O-fucosyllactose, to the intermediates obtainable by this process and to the use of these intermediates. Production comprises the reaction of a protected fucose of general formula (I) with a tri-(C1-C6-alkyl)silyl iodide to form a protected 1-iodofucose followed by reaction of the protected 1-iodofucose with a compound of general formula (I I), in the presence of at least one base and deprotection of the obtained coupling product to obtain 2'-O-fucosyllactose. The variables are defined as follows: Ra and Rb are identical or different and represent -C(=O)-C1-C6-alkyl or -C(=O)-phenyl, wherein phenyl is unsubstituted or optionally comprises 1 to 5 substituents or Ra and Rb together represent a -C(=O)- radical or a substituted methylene radical -C(RdRe)-, Rc represents an RSi radical or benzyl, wherein benzyl is unsubstituted or optionally bears 1, 2 or 3 substituents, RSi represents a radical of formula SiRfRgRh, wherein Rf, Rg and Rh are identical or different and represent, for example C1-C8-alkyl, R1 represents a -C(=O)-R11 radical or a SiR12R13R14 radical, R2 are identical or different and represent for example C1-C8-alkyl, R3 are identical or different and represent for example C1-C8-alkyl or both radicals R3 together represent linear C1-C4-alkenyl which is unsubstituted or bears 1 to 6 methyl groups as substituents.

IPC 8 full level  
**C07H 1/00** (2006.01); **A23C 9/20** (2006.01); **A23L 33/00** (2016.01); **C07H 3/06** (2006.01); **C07H 15/18** (2006.01); **C07H 23/00** (2006.01)

CPC (source: EP KR US)  
**A23C 9/152** (2013.01 - EP KR); **A23L 33/125** (2016.07 - EP KR); **A23L 33/40** (2016.07 - EP KR); **C07H 1/00** (2013.01 - EP KR); **C07H 1/06** (2013.01 - US); **C07H 3/06** (2013.01 - EP KR US); **C07H 15/18** (2013.01 - EP KR US); **C07H 23/00** (2013.01 - EP KR); **A23V 2002/00** (2013.01 - KR)

Citation (search report)  
See references of WO 2017134176A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2017134176 A1 20170810**; AU 2017214322 A1 20180816; BR 112018015833 A2 20181226; CA 3012410 A1 20170810; CN 108602845 A 20180928; CR 20180414 A 20181129; EP 3411379 A1 20181212; JP 2019504091 A 20190214; KR 20180104751 A 20180921; MX 2018009515 A 20180905; US 2021130384 A1 20210506

DOCDB simple family (application)  
**EP 2017052280 W 20170202**; AU 2017214322 A 20170202; BR 112018015833 A 20170202; CA 3012410 A 20170202; CN 201780009200 A 20170202; CR 20180414 A 20170202; EP 17703388 A 20170202; JP 2018540152 A 20170202; KR 20187025460 A 20170202; MX 2018009515 A 20170202; US 201716074168 A 20170202