

Title (en)
METHOD OF SEQUENCE DETERMINATION USING SEQUENCE TAGS

Title (de)
VERFAHREN ZUR SEQUENZBESTIMMUNG MITTELS SEQUENZTAGS

Title (fr)
PROCÉDÉ DE DÉTERMINATION DE SÉQUENCE À L'AIDE D'ÉTIQUETTES DE SÉQUENCE

Publication
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Application
EP 13804085 A 20130611

Priority

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- US 201313835093 A 20130315
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Abstract (en)
[origin: WO2013188471A2] The invention is directed to the use of sequence tags to improve sequence determination of amplicons of related sequences, particularly large and complex amplicons, such as those comprising recombinant nucleic acids encoding immune receptor molecules. In one aspect, sequence reads having the same sequence tags are aligned after which final base calls are determined from a (possibly weighted) average base call from sequence read base calls at each position. Similarly, in another aspect, sequence reads comprising series of incorporation signals are aligned by common sequence tags and base calls in homopolymer regions are made as a function incorporation signal values at each "flow" position.

IPC 8 full level
C12Q 1/68 (2006.01)

CPC (source: CN EP)
C12Q 1/6869 (2013.01 - EP); **C12Q 1/6874** (2013.01 - CN EP)

Citation (search report)

- [X1] WO 2009017678 A2 20090205 - PACIFIC BIOSCIENCES CALIFORNIA [US], et al
- [E] WO 2013130512 A2 20130906 - UNIV NORTH CAROLINA [US]
- [A] WO 2012055929 A1 20120503 - ILLUMINA INC [US], et al
- [AD] US 5846719 A 19981208 - BRENNER SYDNEY [GB], et al
- [X1] C. B. JABARA ET AL: "Accurate sampling and deep sequencing of the HIV-1 protease gene using a Primer ID", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 108, no. 50, 30 November 2011 (2011-11-30), pages 20166 - 20171, XP055201609, ISSN: 0027-8424, DOI: 10.1073/pnas.1110064108
- [A] MILLER JASON R ET AL: "Assembly algorithms for next-generation sequencing data", GENOMICS, ACADEMIC PRESS, SAN DIEGO, US, vol. 95, no. 6, 6 March 2010 (2010-03-06), pages 315 - 327, XP009165741, ISSN: 0888-7543
- [A] MEGAN MANION ET AL: "Reducing Error in Next Generation Sequencing Data with NextGENe Software's Condensation Tool", March 2009 (2009-03-01), pages 1 - 3, XP055226038, Retrieved from the Internet <URL:http://www.softgenetics.com/PDF/ReducingError_NextGenerationSequencing_AppNote.pdf> [retrieved on 20151105]
- See references of WO 2013188471A2

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US 2013045276 W 20130611; AU 2013274366 A 20130611; CA 2875542 A 20130611; CN 201380042163 A 20130611; EP 13804085 A 20130611; JP 2015517372 A 20130611; SG 11201407888R A 20130611