

Title (en)

METHODS TO IDENTIFY EVOLUTIONARILY SIGNIFICANT CHANGES IN POLYNUCLEOTIDE AND POLYPEPTIDE SEQUENCES IN DOMESTICATED PLANTS AND ANIMALS

Title (de)

VERFAHREN ZUR IDENTIFIZIERUNG EVOLUTIONSMÄSSIG SIGNIFIKANTER ÄNDERUNGEN IN POLYNUKLEOTID- UND POLYPEPTIDSEQUENZEN IN HAUSPFLANZEN UND -TIEREN

Title (fr)

METHODES D'IDENTIFICATION DE CHANGEMENTS IMPORTANTS AU NIVEAU EVOLUTIONNAIRE DANS DES SEQUENCES DE POLYNUCLEOTIDES ET DE POLYPEPTIDES CHEZ DES PLANTES ET ANIMAUX DOMESTIQUES

Publication

EP 1501942 A4 20060607 (EN)

Application

EP 03713258 A 20030116

Priority

- US 0301460 W 20030116
- US 34908802 P 20020116
- US 34966102 P 20020117
- US 7904202 A 20020219
- US 36854102 P 20020329

Abstract (en)

[origin: WO03062382A2] The present invention provides methods for identifying polynucleotide and polypeptide sequences which may be associated with commercially or aesthetically relevant traits in domesticated plants or animals. The methods employ comparison of homologous genes from the domesticated organism and its ancestor to identify evolutionarily significant changes and evolutionarily neutral changes. Sequences thus identified may be useful in enhancing commercially or aesthetically desirable traits in domesticated organisms or their wild ancestors.

IPC 1-7

C12Q 1/68; C07H 21/04; C07K 14/415; C12N 15/82

IPC 8 full level

A01H 1/00 (2006.01); **A01H 5/00** (2006.01); **C07K 14/415** (2006.01); **C12N 5/10** (2006.01); **C12N 15/09** (2006.01); **C12N 15/82** (2006.01); **C12P 21/02** (2006.01); **C12Q 1/02** (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP KR)

C07K 14/415 (2013.01 - EP KR); **C12N 15/8261** (2013.01 - EP KR); **C12Q 1/6809** (2013.01 - KR); **C12Q 1/6895** (2013.01 - EP KR); **C12Q 2600/13** (2013.01 - EP); **C12Q 2600/158** (2013.01 - EP); **Y02A 40/146** (2017.12 - EP)

Citation (search report)

- [X] WO 0111088 A2 20010215 - GENOPLEX INC [US]
- [DX] LI WEN-HSIUNG: "Unbiased estimation of the rates of synonymous and nonsynonymous substitution", JOURNAL OF MOLECULAR EVOLUTION, vol. 36, no. 1, 1993, pages 96 - 99, XP008058643, ISSN: 0022-2844
- [X] WHITE S E ET AL: "The molecular evolution of terminal ear1, a regulatory gene in the genus zea", GENETICS, GENETICS SOCIETY OF AMERICA, AUSTIN, TX, US, vol. 153, November 1999 (1999-11-01), pages 1455 - 1462, XP002169167, ISSN: 0016-6731
- See references of WO 03062382A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03062382 A2 20030731; **WO 03062382 A3 20041209**; AU 2003217221 B2 20081127; AU 2009200805 A1 20090326; BR 0306968 A 20060411; CA 2473555 A1 20030731; CN 1630731 A 20050622; EP 1501942 A2 20050202; EP 1501942 A4 20060607; IL 162897 A0 20051120; JP 2005518199 A 20050623; KR 20040081139 A 20040920

DOCDB simple family (application)

US 0301460 W 20030116; AU 2003217221 A 20030116; AU 2009200805 A 20090227; BR 0306968 A 20030116; CA 2473555 A 20030116; CN 03804847 A 20030116; EP 03713258 A 20030116; IL 16289703 A 20030116; JP 2003562250 A 20030116; KR 20047011241 A 20030116