Characterization of the AN6448 cluster in Aspergillus nidulans

With the aim of mapping the polyketome of A. nidulans we have made a library of strains, which individually overexpress PKS genes from an ectopic locus. A screen of this collection on different media demonstrated that AN6448 leads to production of 3-MOA. An inspection of the DNA sequence surrounding this gene uncovered a putative gene cluster including a gene, AN6446, with homology to transcription factors. Based on this observation, we decided to overexpress AN6446. A qRT-PCR analysis of this strain was used to delineate the borders of the gene cluster as well as to stimulate formation of cichorine and a number of new products, from the gene cluster. Subsequent deletion of all genes allowed several steps in the biosynthetic pathway in this cluster to be clarified.

General information
State: Published
Organisations: Department of Systems Biology, Center for Microbial Biotechnology, Organic Chemistry, Center for Systems Microbiology, Department of Chemistry
Pages: 1113-1113
Publication date: 2012
Peer-reviewed: Yes

Publication information
Journal: Planta Medica
Volume: 78
Issue number: 11
ISSN (Print): 0032-0943
Ratings:
Web of Science (2019): Indexed yes
BFI (2018): BFI-level 1
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 1
Scopus rating (2017): CiteScore 2.25 SJR 0.581 SNIP 0.964
Web of Science (2017): Impact factor 2.494
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 1
Scopus rating (2016): CiteScore 1.97 SJR 0.674 SNIP 0.945
Web of Science (2016): Impact factor 2.342
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 1
Scopus rating (2015): CiteScore 2.1 SJR 0.638 SNIP 0.993
BFI (2014): BFI-level 1
Scopus rating (2014): CiteScore 2.15 SJR 0.762 SNIP 1.13
Web of Science (2014): Impact factor 2.152
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 1
Scopus rating (2013): CiteScore 2.37 SJR 0.798 SNIP 1.238
Web of Science (2013): Impact factor 2.339
ISI indexed (2013): ISI indexed yes
BFI (2012): BFI-level 1
Scopus rating (2012): CiteScore 2.35 SJR 0.749 SNIP 1.117
Web of Science (2012): Impact factor 2.348
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 2.23 SJR 0.707 SNIP 1.143
Web of Science (2011): Impact factor 2.153
ISI indexed (2011): ISI indexed yes
BFI (2010): BFI-level 1
Scopus rating (2010): SJR 0.778 SNIP 1.137
Web of Science (2010): Impact factor 2.369
BFI (2009): BFI-level 1
Scopus rating (2009): SJR 0.777 SNIP 1.097
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.683 SNIP 0.971
Scopus rating (2007): SJR 0.839 SNIP 1.351
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 0.896 SNIP 1.322
Scopus rating (2005): SJR 0.856 SNIP 1.154
Scopus rating (2004): SJR 0.788 SNIP 1.333
Scopus rating (2003): SJR 0.853 SNIP 1.334
Scopus rating (2002): SJR 0.915 SNIP 1.587
Scopus rating (2001): SJR 0.959 SNIP 1.358
Scopus rating (2000): SJR 0.856 SNIP 1.199
Scopus rating (1999): SJR 0.912 SNIP 1.241
Original language: English
DOIs:
10.1055/s-0032-1320546
Source: dtu
Source-ID: n::oai:DTIC-ART:isi/369210492::19116
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2012