BIOTECHABS
(Derwent Biotechnology Abstracts)

Subject Coverage

- Agriculture
- Biocatalysis
- Biochemical Engineering
- BIOINFORMATICS methodologies, databases, hardware and software
- Cell Culture
- Chemistry: Physicochemical and Biological Assays relevant to Biotechnological Processes
- Downstream Processing
- Food Additives and SCP
- Fuels produced by Fermentation or Similar Processes
- GENOMICS and PROTEOMICS, including pharmacogenomics, expression profiling, ESTs and SNPs, and high throughput screening
- Microbiology: Genetics and Fermentation
- Other Chemicals produced by Microorganisms and Enzymatic Synthesis
- Pharmaceuticals produced by Microorganisms and Enzymatic Synthesis
- Tissue culture and engineering products, processes and applications
- Waste Disposal

File Type

Bibliographic

Features

Thesaurus	Controlled Term (/CT)		
Alerts (SDIs)	Not available		
CAS Registry Number® Identifiers	☐		
Keep & Share	☑	SLART	☐
Learning Database	☐	Structures	☐

Record Content

- Records contain bibliographic information, Derwent's abstract and controlled indexing.
- For the file crossover to DWPI, the Derwent Accession Number is available in all patent records.

File Size

- 479,398 citations

Coverage

1982-2010

Updates

Static File

Language

English

Database Producer

Clarivate
Friars House, 160 Black Friars Rd.
London SE1 8EZ
United Kingdom

Sources	• Journals • Patents • Conference contributions
User Aids	• Online Helps (HELP DIRECTORY lists all help messages available) • STNGUIDE
Cluster	• ALLBIB • AUTHORS • BIOSCIENCE • CHEMENG • CORPSOURCE STN Database Cluster information: https://www.cas.org/support/training/stn/database-clusters

Search and Display Field Codes

General Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index (contains single words from title (TI), abstract (AB), and controlled term (CT), as well as enzyme commission numbers (EC))	None or /BI	S PRODUCTION OF CARBOCYCLIC NUCLEOSIDES S EC-3.1.1.3 S LIPASE(L)CARBOXYLESTERASE	TI, AB, CT, EC
Accession Number	/AN	S 1992-14434/AN	AN
Application Country (WIPO code and text)	/AC	S EP/AC(S)1992/AY	AI
Application Date **(1)**	/AD	S EP/AC(S)20 FEB 1992/AD	AI
Application Number **(2)**	/AP	S 1992EP-0250036/AP S EP1992-250036/AP	AI
Application Year **(1)**	/AY	S 1991-1992/AY(S)FR/AC	AI
Author	/AU	S BAINES B S/AU S BAINES, B S/AU	AU
Classification Code (code and/or text)	/CC (or /CCEN)	S K/CC AND GLAXO/CS S LIPASE NOT BIOCATALYSIS/CC	CC
Controlled Term **(3)**	/CT	S SOIL DECONTAMINATION/CT	
Corporate Source **(3)**	/CS	S GRANADA-GENET?/CS S "GRANADA-GENET."/CS	CS
Document Type (code and text)	/DT (or /TC)	S K/CC AND P/DT S JOURNAL/DT AND SOIL DECONTAMINATION/CT	DT
Entry Date **(1)**	/ED (or /UP)	S ED>FEB 2009	ED
Enzyme Commission Number	/EC	S EC-3.1.1.3/EC AND US/PC	TI,AB,CT,EC
International (Standard) Document Number (contains CODEN and ISSN)	/ISN	S EMTED2/ISN S 1001-0742/ISN	ISN, SO
Journal Title	/JT	S DNA CELL BIOL./JT	JT, SO
Language (ISO code and text)	/LA	S DE/LA AND L10 S L7 AND ENGLISH/LA	LA
Location **(4)**	/LO	S GLAXO RESEARCH/LO	LO
Other Source **(5)**	/OS	S 1992-333672/OS	OS
Patent Assignee **(3)**	/PA	S PREUSSAG/PA S PROTEIN-DESIGN-LABS/PA	PA
Patent Country (WIPO code and text)	/PC	S EP/PC(S)1992/PY S UNITED KINGDOM/PC	PI
Patent Number **(2)**	/PN	S EP-507421/PN S EP507421/PN S EP0507421/PN	PI
Priority Country (WIPO code and text)	/PRC	S BE/PRC(S)1991/PRY S UNITED STATES/PRC	PRAI
Priority Date **(1)**	/PRD	S 18 FEB 1991/PRD	PRAI
Priority Date First **(1)**	/PRDF	S MARCH 1992/PRDF(S)JP/PRC	PRAI
Priority Number **(2)**	/PRN	S 1991EP-0200379/PRN S EP1991-200379/PRN	PRAI
Priority Year **(1)**	/PRY	S 1990-1991/PRY	PRAI
Priority Year, First **(1)**	/PRYF	S 1990-1991/PRYF(S)BE/PRC	PRAI
Publication Date **(1)**	/PD	S 7 OCT 1992/PD(S)EP/PC	PI
Publication Year **(1)**	/PY	S 1990-1991/PY(L)EMTED2/SO	PI, PY, SO
Source (contains journal title, CODEN, ISSN, collation and meeting information)	/SO	S ENZYME MICROB/SO S (DECHEMA(S)CONF?)/SO	SO
Title	/TI	S DECONTAMINATION OF SOIL/TI	TI

(1) Numeric search field that may be searched using numeric operators or ranges.
(2) Either STN or Derwent format may be used.
(3) Search with implied (S) proximity is available in this field.
(4) Search with implied (L) proximity is available in this field.
(5) Contains the WPIDS/WPIX/WPINDEX accession number.

Controlled Term (/CT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command.

Code	Content	Examples
ALL	All Associated Terms (BT, SELF, USE, UF, EXA, TNA, SNA, EC, RT, OLD, NEW, NT, KT)	E FUNGICIDE+ALL/CT
AUTO **(1)**	Automatic Relationship (SELF, USE, UF, OLD, NEW, TNA, SNA, EC)	S FERMENTER+AUTO/CT
BT	Broader Terms (also BT1=1st level, BT2=2nd level etc.)	E BENOMYL+BT/CT
HIE	Hierarchy Terms (all broader and narrower terms) (BT, SELF, NT)	E PROTEASE+HIE/CT
KT	Keyword Terms (KT, SELF)	E ENZYME+KT/CT
NT	Narrower Terms (also NT1=1st level, NT2=2nd level etc.)	S FUNGICIDE+NT/CT
PFT	Forbidden and Preferred Terms (SELF, USE, UF)	S ANTIFUNGAL+PFT/CT
RT	Related Terms (SELF, RT)	E PESTICIDE+RT/CT
STD	Standard Terms (BT, SELF, NT, RT)	E DINOSEB+STD/CT
USE	Preferred Terms (SELF, USE)	S FERMENTER+USE/CT

(1) Automatic Relationship is SET OFF. In case of SET REL ON the result of EXPAND or SEARCH without any relationship code is the same as described for AUTO.

DISPLAY and PRINT Formats

Any combination of formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 TI PI. The fields are displayed or printed in the order requested.

Hit-term highlighting is available for all fields. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB	Abstract	D TI AB
AI (AP) **(1)**	Application Information	D AI
AN	Accession Number	D AN
AU	Author	D AU
CC (CCEN)	Classification Code (code and/or text)	D CC
CS	Corporate Source	D AU CS
CT	Controlled Term	D CT
DT (TC)	Document Type	D DT
EC **(2)**	Enzyme Commission Number	D EC
ISN **(2)**	International (Standard) Document Number	D ISN
JT **(2)**	Journal Title	D JT
LA	Language	D LA
LO	Location	D LO
OS	Other Source	D OS
PA	Patent Assignee	D PA TI 1-10
PI (PN) **(1)**	Patent Information	D PI PRAI

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
PRAI (PRN) **(1)** PY **(2)** SO TI ABS ALL DALL IALL BIB IBIB IND SCAN **(3)** TRIAL (TRI, SAM)	Priority Information Publication Year Source Title AN, AB AN, TI, AU, CS, PA, LO, SO, PI, AI, PRAI, DT, LA, OS, AB, CC, CT ALL, delimited for post processing ALL, indented with text labels AN, TI, AU, CS, PA, LO, SO, PI, AI, PRAI, DT, LA, OS (default) BIB, indented with text labels AN, CC, CT AN, TI AN, TI, CC, CT	D PRAI D PY D SO D TI CT D TI ABS 1-5 DIS ALL D DALL D IALL 1-3 L4 D BIB ABS D IBIB KW D IND D SCAN D TRI 1-10
HIT KWIC OCC	Hit term(s) and field(s) Hit term(s) plus 20 words before and after hit term(s) (KeyWord-In-Context) Number of occurrences of hit term(s) and field(s) in which they occur	D HIT D KWIC DOCC

(1) Application, priority and patent numbers are available in Derwent and STN format. The format for DISPLAY, PRINT, SELECT and SORT is controlled by the Messenger SET PATENT command. The STN format is default. 'SET PAT DERWENT' changes (permanently) to the Derwent format. To change to the STN format again, enter 'SET PAT STN'.
(2) Custom display only.
(3) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.

SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y **(2)**	N
Accession Number	AN	Y	N
Application Country	AC	Y	Y
Application Date	AD	Y	Y
Application Number	AP (AI)	Y	Y
Application Year	AY	Y	Y
Author	AU	Y	Y
Classification Code (code and/or text)	CC (CCEN)	Y	N
CODEN	CODEN	N	Y
Controlled Term	CT	Y	N
Corporate Source	CS	Y	Y
Document Type	DT (CT)	Y	Y

SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Enzyme Commission Number	EC	Y	Y
International (Standard) Document Number	ISN	Y **(3)**	Y
Journal Title	JT	Y	Y
Language	LA	Y	Y
Location	LO	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Other Source (DWPI accession number)	OS	Y	Y
Patent Assignee	PA	Y	Y
Patent Country	PC	Y	Y
Patent Number	PN (PI)	Y	Y
Priority Country	PRC	Y	Y
Priority Date	PRD	Y	Y
Priority Date First	PRDF	Y	Y
Priority Number	PRN (PRAI)	Y	Y
Priority Year First	PRYF	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Source	SO	Y **(4)**	N
Title	TI	Y (default)	Y

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT AU.
(2) Appends /BI to the terms created by SELECT.
(3) Selects or analyzes ISSN and CODEN with /ISN appended to the terms created by SELECT.
(4) Selects or analyzes ISSN and CODEN with /SO appended to the terms created by SELECT.

Sample Records

DISPLAY ALL

```
AN    1997-06228  BIOTECHABS
TI    Purification, characterization, and properties of two xylanases from
      Humicola insolens;
         endo-1,4-beta-D-xylanase isoenzyme isolation
AU    Dusterhoft E M; Linssen V A J M; Voragen A G J; Beldman G
CS    Univ.Wageningen-Agr.
LO    Department of Food Chemistry and Microbiology, Wageningen Agricultural
      University, P.O. Box 8129, 6700 EV Wageningen, The Netherlands.
SO    Enzyme Microb.Technol.; (1997) 20, 6, 437-45
      CODEN: EMTED2    ISSN:  0141-0229
DT    Journal
LA    English
AB     Two endo-1,4-beta-D-xylanases (EC-3.2.1.8), xyl1 and xyl2, were purified
       from a commercial enzyme preparation derived from Humicola insolens by
       anion-exchange chromatography, size-exclusion chromatography and cation-
       exchange chromatography.  The homogenous proteins had a mol.weight of
       6,000 and 21,000, and isoelectric points of 9.0 and 7.7 for xyl1 and xyl2,
       respectively.  Both enzymes had similar pH and temperature optima (pH 6-
       6.5 and 55-60 deg), but their stability at various pH and temperature
       differed.  The molar activity towards beech, birch and larch xylan, and
       wheat arabinoxylans was higher for xyl2.  Both enzymes had remarkably
       lower molar activities toward the insoluble fractions of these xylans or
       toward the essentially insoluble beech xylan, but the decrease was less
       pronounced with xyl2.  This might be explained by differences in specific
       adsorption, with xyl2 adsorbing strongly on beech xylan. In contrast to
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xyl1, xyl2 was markedly inhibited by a number of metal ions. The reaction products formed during hydrolysis of different xylans and the end products were the same for both enzymes, but their relative proportions differed slightly. (34 ref)

CC K BIOCATALYSIS; K1 Isolation and Characterization

CT HUMICOLA INSOLENS ENDO-1,4-BETA-D-XYLANASE ISOENZYME PURIFICATION, CHARACTERIZATION FUNGUS ENZYME EC-3.2.1.8 (VOL.16, NO.11)

DISPLAY IBIB

ACCESSION NUMBER: 2001-00753 BIOTECHABS
TITLE: Microalgae: a green source of renewable H2; recent advances in algal hydrogen production using e.g. Chlamydomonas reinhardtii; a review
AUTHOR: Ghirardi M L; Zhang L; Lee J W; Flynn T; Seibert M; Greenbaum E; *Melis A
CORPORATE SOURCE: Nat.Renewable-Energy-Lab.Colorado; Univ.California; Oak-Ridge-Nat.Lab.
LOCATION: University of California, Berkeley, CA 94720-3102, USA. Email: melis@nature.berkely.edu
SOURCE: Trends Biotechnol.; (2000) 18, 12, 506-11
CODEN: TRBIDM
ISSN: 0167-9430
DOCUMENT TYPE: Journal
LANGUAGE: English

DISPLAY ALL (Derwent format)

AN 1997-04239 BIOTECHABS
TI Crystallization of macromolecules; e.g. nucleic acid crystallization method
AU Fibi M
PA Behringwerke
LO Marburg, Germany.
PI EP----757057 5 Feb 1997
AI 1996EP-0110784 4 Jul 1996
PRAI 1995DE-1028507 3 Aug 1995
DT Patent
LA German
OS WPI: 1997-121141 [12]

AB Macromolecules such as glycoproteins and nucleic acids are crystallized in the presence of a 4-(1-18C alkyl)-umbelliferone salt (A). In a preferred process, (A) is 4-methylumbelliferone sodium salt. A solution containing the macromolecule at 0.1-10,000 ug/ml is mixed at a ratio of 1000:1 to 1:1000 with a solution of 0.1-1,000 mM (A), and the mixture is incubated at 0-25 deg. The macromolecule solution is preferably a phosphate buffer solution (pH 3-9) containing 1-500 mM (A), provided that the concentration of (A) in the macromolecule solution is less than that in the crystallization solution. The crystallized macromolecules may be used for X-ray structural analysis, as a pharmaceutical or as seed crystals. (4pp)

CC A GENETIC ENGINEERING AND FERMENTATION; A1 Nucleic Acid Technology

CT MACROMOLECULE E.G. NUCLEIC ACID CRYSTALLIZATION METHOD (VOL.16, NO.8)

EXPAND in CT THESAURUS

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=> e fungicide+all/ct
E1       15381    BT1  ANTIBIOTIC/CT
E2         932   BT2  AGRICULTURE/CT
E3        9736    BT1  pesticide/CT
E4        4165     -->  FUNGICIDE/CT
E5          22      UF   antifungal/CT
E6         591      UF   antimicrobial/CT
E7           5      UF   antimycotic/CT
E8           3      UF   fungistatic/CT
E9          53      NT1  AMPHOTERICIN/CT
E10         13      NT1  AZASERINE/CT
E11         17      NT1  BAFILOMYCIN/CT
E12         53      NT1  BENOMYL/CT
E13         12      NT1  BLASTICIDIN-S/CT
E14          3      NT1  BUTALACTIN/CT
E15          2      NT1  DAPIRAMYCIN/CT
E16          1      NT1  DEHYDROIVAXILLIN/CT
E17         15      NT1  DINOSEB/CT
E18         17      NT1  EMODIN/CT
E19         18      NT1  GRISEOFULVIN/CT
E20         62      NT1  ITURIN/CT
E21          4      NT1  LYDICAMYCIN/CT
E22          8      NT1  METALAXYL/CT
E23         79      NT1  NIKKOMYCIN/CT
E24          1      NT1  NITROSOFUNGIN/CT
E25         54      NT1  NYSTATIN/CT
E26         32      NT1  OLIGOMYCIN/CT
E27        450      NT1  PENTACHLOROPHENOL/CT
E28         13      NT1  SINEFUNGIN/CT
E29          0      NT1  VIRIDOFULVIN/CT
E30          0      KT   FUNGICIDE RESISTANCE/CT
********** END **********
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