

## CABA

<b>Subject Coverage</b>	<ul style="list-style-type: none"> <li>• Agriculture</li> <li>• Agricultural chemicals (fertilizers, pesticides, and veterinary pharmaceuticals)</li> <li>• Agricultural economics and trade</li> <li>• Animal sciences and production</li> <li>• Biotechnology</li> <li>• Buildings and machinery</li> <li>• Crop protection</li> <li>• Crop sciences and production</li> <li>• Developing countries (rural development and sociology)</li> <li>• Engineering</li> <li>• Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Food science and technology</li> <li>• Forestry</li> <li>• Forest products (processing of pulp, lumber, chemicals, resins, and other wood products)</li> <li>• Genetics</li> <li>• Human medicine (fungal, parasitic diseases and diseases caused or transmitted by insects)</li> <li>• Human nutrition</li> <li>• Soils and fertilizers</li> <li>• Tourism, leisure, and recreation</li> <li>• Veterinary medicine</li> </ul>
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**File Type** Bibliographic

<b>Features</b>	Thesaurus	Controlled Term (/CT), Geographic Term (/GT), Organism Name (/ORGN)
	<a href="#">Alerts (SDIs)</a>	Weekly or Monthly (Weekly is the default)
	<a href="#">CAS Registry Number® Identifiers</a>	<input checked="" type="checkbox"/>
	<a href="#">Keep &amp; Share</a>	<input checked="" type="checkbox"/> <a href="#">SLART</a> <input checked="" type="checkbox"/>

**Record Content**

- Records contain bibliographic information, abstracts, and indexing information, including CAS Registry Numbers®.

**File Size** More than 11.1 million records (12/2023)

**Coverage** 1973-present

**Updates** Updated weekly

**Language** English

**Database Producer**  
 CAB International  
 Nosworthy Way  
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 Oxon, OX10 8DE, UK  
 Phone: +44 1491 832111  
 Fax: +44 1491 826090  
 Email: c.ison@cabi.org  
 Copyright Holder

<b>Sources</b>	<ul style="list-style-type: none"> <li>• Over 9,000 serial journals in over 50 languages</li> <li>• Annual reports</li> <li>• General reports</li> <li>• Books</li> <li>• Handbooks</li> <li>• Bulletin</li> </ul>	<ul style="list-style-type: none"> <li>• Review journals</li> <li>• Symposia</li> <li>• Conference proceedings</li> <li>• Newsletters</li> <li>• Discussion papers</li> <li>• Theses</li> </ul>
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**User Aids**

- CAB Thesaurus \*
  - Subject Codes List \*
  - Cabi Codes \*
  - Online Helps (HELP DIRECTORY lists all help messages available)
  - STNGUIDE
- \* available from the producer
- 

**Cluster**

- AGRICULTURE
- ALLBIB
- AUTHORS
- BIOSCIENCE
- CASRNS
- CHEMISTRY
- CORPSOURCE
- ENVIRONMENT
- FOOD
- FORMULATIONS
- NPS
- TOXICOLOGY

STN Database Cluster information:

<https://www.cas.org/support/training/stn/database-clusters>

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## Search and Display Field Codes

Fields that allow left truncation are indicated by an asterisk (\*).

### General Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from the title (TI), controlled term (CT), supplementary term (ST), broader term (BT), abstract (AB), organism name (ORGN), and geographic term (GT) fields, as well as CAS Registry Numbers®)	None or /BI	S SUSTAINED RELEASE S MOSQUITO? (S) CONTROL? S 57-92-1 S ?TICIDE?	AB, BT, CT, GT, ORGN, RN, ST, TI
Abstract*	/AB	S ?PLASMA?/AB	AB
Accession Number	/AN	S 2008:100006/AN	AN
Author	/AU	S RAO A S/AU	AU
Broader Term	/BT	S INSULASPIS/BT S GENE (FUNGI)/BT	BT
Classification Code (code and text) (1)	/CC	S HH100/CC	CC
Controlled Term (2)	/CT	S BIOLOGICAL CONTROL/CC S BACTERIAL INSECTICIDES/CT	CT
Controlled Word	/CW	S CABLES+ALL/CT S INSECTICIDES/CW	BT, CT
Corporate Source (1)	/CS	S BHABHA/CS S BHABHA RES CENT/CS	CS
Country of Publication (ISO code and text)	/CY	S INDIA/CY S IN/CY	CY
Digital Object Identifier	/FTDOI	S HTTPS://DOI.ORG/10.9787/KJBS?/FTDOI	FTDOI, SO
Document Number	/DN	S 20053076514/DN	DN
Document Type (code and text)	/DT (or /TC)	S C/DT S CONFERENCE/DT	DT
E-mail Address (1)	/EML	S RUCAR@IAPAR.BR/EML	EML, CS
Entry Date (3)	/ED	S ED> NOV 2010	ED, UP
Field Availability	/FA	S L2 AND AB/FA	FA
Geographic Term (2)	/GT	S UK/GT S UK+RT/GT	GT
International Standard (Document) Number (contains ISSN and ISBN)	/ISN	S 1-84593-116-5/ISN S 0285-2543/ISN	ISN, SO
Journal Title	/JT	S CURRENT SCIENCE INDIA/JT	JT, SO
Language (ISO code and text)	/LA	S ENGLISH/LA S EN/LA	LA
Meeting Title (1)	/MT	S CHEMISTRY AID BIOLOGY?/MT	MT, SO
Organism Name (2)	/ORGN	S DIPTERA/ORGN S DIPYLIDIIDAE+NT/ORGN	ORGN
Publication Date (3)	/PD	S 20050000/PD	PD, PY, SO
Publication Year (3)	/PY	S PY=2010	PY, SO
Section Code (4)	/SC	S 1C/SC	SC
Source (contains publication title, collation information (volume, issue, pagination, and number of references), publisher, meeting information, patent information, publication year, ISBN, and ISSN)	/SO	S CURRENT SCIENCE/SO S USSR PATENT/SO	SO

## General Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Summary Language (ISO code and text)	/SL	S FRENCH/SL S FR/SL	SL
Supplementary Term <b>(1)</b>	/ST	S FORMULATION/ST	ST
Title*	/TI	S WORLD AGRICULTURAL TRADE/TI	TI
Universal Resource Locator <b>(1)</b>	/URL	S HTTP://WWW.PLANT?/URL	URL, SO
Update Date <b>(3)</b>	/UP	S L1 AND UP>MAY 2013	ED, UP

**(1)** Implied (S) proximity is available in this field.

**(2)** Thesaurus is available in this field.

**(3)** Numeric search field that may be searched with numeric operators or ranges.

**(4)** Field only for internal use.

## Property Fields<sup>1)</sup>

In CABA a numeric search for a specific set of physical properties (/PHP) is available within the abstract and title fields. The numeric values are not displayed as single fields, but highlighted within the hit displays.

Use EXPAND/PHP to search for all available physical properties. A search with the respective field codes will be carried out in the abstract and title fields. The /PHP index contains a complete list of codes and related text for all physical properties available for numeric search.

Field Code	Property	Unit	Symbol	Search Examples
/AOS	Amount of substance	Mol	mol	S 10 /AOS
/BIR	Bit Rate	Bit/Second	bit/s	S 330/BIR
/BIT	Stored Information	Bit	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	F	S 1-10 MF/CAP
/CDN	Current Density	Ampere/Square Meter	A/m <sup>2</sup>	S CDN>10 A/M**2
/CMOL	Molarity, Molar Concentration	Mol/Liter	mol/L	S UREA/BI (S) 2/CMOL
/CON	Conductance	Siemens	S	S 1S-3/CON
/DB	Decibel	Decibel	dB	S DB>50
/DEG	Degree	Degree	°	S LOW LATITUDE/BI (S) 30/DEG
/DEN	Density (Mass Concentration)	Kilogram/Cubic Meter	kg/m <sup>3</sup>	S ANTIBODY/BI (S) 5E-3-10E-3/DEN
/DEQ	Dose Equivalent	Sievert	Sv	S 2/DEQ
/DOS	Dosage	Milligram/Kilogram	mg/kg	S DOS=0.8
/DV	Viscosity, dynamic	Pascal * Second	Pa * s	S DV>10
/ECH	Electric Charge	Coulomb	C	S 2-3/ECH
/ECO	Electrical Conductivity	Siemens/Meter	S/m	S ECO>800 S/M
/ELC	Electric Current	Ampere	A	S 1-10/ELC
/ELF	Electric Field	Volt/Meter	V/m	S 1-300/ELF
/ENE	Energy	Joule	J	S TORQUE (5A) 20 - 30 /ENE
/ERE	Electrical Resistivity	Ohm * Meter	Ohm * m	S ERE>2
/FOR	Force	Newton	N	S 50 N /FOR
/FRE	Frequency	Hertz	Hz	S OSCILLAT?/BI (S) 1- 3/FRE
/IU	International Unit	none	IU	S IU>1000 (P) ANTIBIOTIC
/KV	Viscosity, kinematic	Square Meter/Second	m <sup>2</sup> /s	S SILICON?/BI (5A) 10E-5 M**2/S /KV
/LEN (or /SIZ)	Length, Size	Meter	m	S 1-4/LEN
/LUME	Luminous Emittance, Illuminance	Lux	lx	S 10-50/LUME
/LUMF	Luminous Flux	Lumen	Lm	S LUMF>10
/LUMI	Luminous Intensity	Candela	cd	S LUMI<4
/M	Mass	Kilogram	kg	S GESTATIONAL AND M=18
/MCH	Mass to Charge Ratio	none	m/z	S MCH=50
/MFD (or /MFS)	Magnetic Flux Density	Tesla	T	S MFD>102
/MFR (or /MFL)	Mass Flow Rate	Kilogram/Second	kg/s	S MFR<0.1
/MM	Molar Mass	Gram/Mol	g/mol	S 2000-3000 G/MOL/MM
/MOLS	Molality of Substance	Mol/Kilogram	mol/kg	S 01.-10 MOL/KG/MOLS
/MVR	Melt Volume Rate	none	g/10 min	S 1/MVR
/NUC	Nutrition Content	none	g/100 kcal	S NUC<100 (P) NUTRIENT
/PER	Percent (Proportionality)	none	%	S POLYMER?/AB (5A) 4/PER
/PHV	pH Value	pH	pH	S 7.4-7.6/PHV
/POW	Power	Watt	W	S MICROWAVE/BI (S) POWER/BI (S) 350 WATT/POW
/PRES (or /P)	Pressure	Pascal	Pa	S (VACUUM (5A) DISTILL?)/BI (S) 1000-1100/PRES
/RAD	Radioactivity	Becquerel	Bq	S RAD/PHP
/RES	Electrical Resistance	Ohm	Ohm	S ELECTRICAL/BI (S) 10-100/RES
/RSP	Rotational Speed	Revolution/Minute	rpm	S 2-100/RSP (S) MACHINE/AB
/SAR	Area /Surface Area	Square Meter	m <sup>2</sup>	S (COATING? OR FOIL?)/BI (S) 10-100/SAR
/SOL	Solubility	Gram/100 gram	g/100 g	S SOL>20 (10W) WATER
/STSC	Surface Tension	Joule /Square Meter	J/m <sup>2</sup>	S 60 J/M**2/STSC
/TCO	Thermal Conductivity	Watt/Meter * Kelvin	W/m * K	S 1/TCO (S) HEAT?

### Property Fields (cont'd)

Field Code	Property	Unit	Symbol	Search Examples
/TEMP (or /T)	Temperature	Kelvin	K	S (HEAT? (10A) LIQUID?) (S) 5/TEMP
/TIM	Time	Second	s	S ?INCUB?/BI (10A) 10-50/TIM
/VEL (or /V)	Velocity	Meter per Second	m/s	S REDUC?/BI (S) 1E-3-5E-3/VEL
/VELA	Velocity, angular	Radian/Second	rad/s	S VELA>10
/VLR	Volumetric Flow Rate	Cubic Meter/Second	m <sup>3</sup> /s	S 1-2/VLR (5A) POWDER
/VOL	Volume	Cubic Meter	m <sup>3</sup>	S 1E-8-2E-8/VOL.EX
/VOLT	Voltage	Volt	V	S POTENTIAL/BI (10A) 5E-3 V <VOLT<7E-3 V

1) Exponential format is recommended for the search of particularly high or low values, e.g., 1.8E+7 or 1.8E7 (for 18000000) or 9.2E-8 (for 0.00000092).

### Controlled Term (/CT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the /CT thesaurus.

Code	Content	Examples
ALL	All Associated Terms (BT, RBT, SELF, NOTE, RN, USE, UF, NT, RNT, RT)	E BACTERIAL INSECTICIDES+ALL/CT
AUTO (1)	Automatic Relationship Code (Narrower Terms) (SELF, NT)	E ORGANOCHLORINE INSECTICIDES+AUTO/CT
BT	Broader Terms (BT, SELF)	E WEED CONTROL+BT/CT

### Controlled Term (/CT) Thesaurus (cont'd)

Code	Content	Examples
HIE	Hierarchy Terms (Broader and Narrower Terms) (BT, SELF, NT)	E VIRAL INSECTICIDES+HIE/CT
KT	Keyword Terms (SELF, KT)	E CONTROL+KT/CT
NOTE	Notes (SELF, NOTE, RN)	E POTATO STARCH+NOTE/CT
NT	Narrower Terms (SELF, NT)	E INSECT GROWTH REGULATORS+NT/CT
PFT	Preferred and Forbidden Terms (SELF, USE, UF)	E BIOLOGICAL CONTROL+PFT/CT
RBT	Related Broader Terms (RBT, SELF)	E 1-NAPHTHOL+RBT/CT
RNT	Related Narrower Terms (SELF, RNT)	E ABSORBENTS+RNT/CT
RT	Related Terms (See also terms) (SELF, RBT, RT, RNT)	E MICROBIAL PESTICIDES+RT/CT
STD	Broader, Narrower, and Related Terms (BT, RBT, SELF, NT, RNT, RT)	E DISEASE CONTROL+STD/CT
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E HORMONAL CONTROL+UF/CT
USE	Use Terms (Preferred Terms) (SELF, USE)	E ENDOCRINE CONTROL+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.

## Geographic Term (/GT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the /GT thesaurus.

Code	Content	Examples
ALL	All Associated Terms (BT, RBT, SELF, NOTE, USE, UF, NT, RNT, RT)	E UK+ALL/GT
AUTO (1)	Automatic Relationship Code (Narrower Terms) (SELF, NT)	S SCOTLAND+AUTO/GT
BT	Broader Terms (BT, SELF)	E CONNECTICUT+BT/GT
HIE	Hierarchy Terms (Broader and Narrower Terms) (BT, SELF, NT)	E USA+HIE/GT
KT	Keyword Terms (SELF, KT)	E AMERICA+KT/GT
NOTE	Notes (SELF, NOTE)	S RIFT VALLEY LAKES+NOTE/GT
NT	Narrower Terms (SELF, NT)	S ECUADOR+NT/GT
PFT	Preferred and Forbidden Terms (SELF, USE, UF)	E USA+PFT/GT
RBT	Related Broader Terms (RBT, SELF)	E YUKON RIVER+RBT/GT
RNT	Related Narrower Terms (SELF, RNT)	E UK+RNT/GT
RT	Related Terms (See also terms) (SELF, RBT, RT, RNT)	E PUERTO RICO+RT/GT
STD	Broader, Narrower, and Related Terms (BT, RBT, SELF, NT, RNT, RT)	E CARIBBEAN+STD/GT
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E USA+UF/GT
USE	Use Terms (Preferred Terms) (SELF, USE)	E UNITED STATES OF AMERICA+USE/GT

(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.

## Organism Name (/ORGN) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the /ORGN thesaurus.

Code	Content	Examples
ALL	All Associated Terms (BT, RBT, SELF, NOTE, RN, USE, UF, NT, RNT, RT)	E DIPTEROCARPUS+ALL/ORGN
AUTO (1)	Automatic Relationship Code (Narrower Terms) (SELF, NT)	S CANTHIUM+AUTO/ORGN
BT	Broader Terms (BT, SELF)	E SCARABAEIDAE+BT/ORGN
HIE	Hierarchy Terms (Broader and Narrower Terms) (BT, SELF, NT)	E TEMNOSCHEILA+HIE/ORGN
KT	Keyword Terms (SELF, KT)	E TEMNOSCHEILA+KT/ORGN
NOTE	Notes (SELF, NOTE)	E MYCOBACTERIUM MALMONESE+NOTE/ORGN
NT	Narrower Terms (SELF, NT)	E ALPHITOBIUS+NT/ORGN
PFT	Preferred and Forbidden Terms (SELF, USE, UF)	E POACEAE+PFT/ORGN
RBT	Related Broader Terms (RBT, SELF)	E ALOPEX LAGOPUS+RBT/ORGN
RNT	Related Narrower Terms (SELF, RNT)	E PSEUDOCEREALS+RNT/ORGN
RT	Related Terms (See also terms) (SELF, RBT, RT, RNT)	E PROCLADIUS+RT/ORGN
STD	Broader, Narrower, and Related Terms (BT, RBT, SELF, NT, RNT, RT)	E DIPLACHNE+STD/ORGN
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E GRAMINEAE+UF/ORGN
USE	Use Terms (Preferred Terms) (SELF, USE)	S POACEAE+USE/ORGN

(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 AU. 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 1-5 AN, AB
AN	Accession Number	D 1-5 AN
AU	Author	D AU TI 2
BT	Broader Term	D TI BT 1-5
CC	Classification Code	D CC, RN 8-10
CS	Corporate Source	D CS
CT	Controlled Term	D AN CT 1-2
CY	Country of Publication	D CY TI
DN	Document Number	D DN 1-5
DT (TC)	Document Type	D DT TI
ED	Entry Date	D ED
EML (1)	E-mail Address	D EML
FTDOI (1)	Digital Object Identifier	D FTDOI
GT	Geographic Term	D TI GT
ISN (1)	International Standard (Document) Number	D ISN 1-2
JT (1)	Journal Title	D JT 1-2
LA	Language	D 2 6 LA
MT (1)	Meeting Title	D MT
ORGN	Organism Name	D ORGN 1-10
PD (1)	Publication Date	D PD
PY (1)	Publication Year	D TI PY
RN	CAS Registry Number	D 2 RN
SC	Section Code	D SC
SL	Summary Language	D SL 1,3
SO	Source	D SO TI
ST	Supplementary Term	D CT ST
TI	Title	D TI 1-10
UP	Update Date	D UP
URL (1)	Uniform resource Locator	D URL
ABS	AB	D ABS 1-3
IABS	AB, with text label	D IABS 1-3
ALL	AN, DN, TI, AU, CS, SO, CY, DT, LA, SL, ED, AB, CC, SC, GT, CT, BT, ST, RN, ORGN	D 1-3 ALL
DALL	ALL, delimited for post processing	D DALL
IALL	ALL, indented with text labels	D IALL 1-4
BIB	AN, DN, TI, AU, CS, SO, CY, DT, LA, SL, ED (BIB is the default)	D 8 BIB
IND	CC, GT, CT, BT, ST, RN, ORGN	D BIB, IND
SAM (TRI, TRIAL)	TI, CC, GT, CT, BT, ST, RN, ORGN	D SAM TOTAL
SCAN (2)	TI, CC, GT, CT, BT, ST, RN, ORGN (random display, no answer numbers)	D SCAN
STD	AN, TI, AU, CS, PI, SO, DT, LA, SL	D STD 1,5
ISTD	STD, indented with text labels	D ISTD
HIT	Hit term(s) and field(s)	D HIT
KWIC	Up to 50 words before and after hit term(s) (KeyWord-In-Context)	D KWIC
OCC	Number of occurrences of hit term(s) and field(s) in which they occur	D OCC

(1) Custom display only

(2) 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	N
Accession Number	AN	Y	N
Author	AU	Y	Y
Broader Term	BT	Y	N
CAS Registry Number	RN	Y (2)	N
Citation	CIT	Y (3,4)	N
Classification Code	CC	Y	Y
Controlled Term	CT	Y	N
Corporate Source	CS	Y	Y
Country of Publication	CY	Y	Y
Digital Object Identifier	FTDOI	Y	Y
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	Y
E-mail Address	EML	Y	Y
Entry Date	ED	Y	Y
Geographic Term	GT	Y	Y
International Standard Book Number	ISBN	N	Y
International Standard (Document) Number	ISN	Y	N
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	Y	Y
Language	LA	Y	Y
Meeting Title	MT	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Organism Name	ORGN	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Source	SO	Y (5)	N
Summary Language	SL	Y	Y
Supplementary Term	ST	Y	N
Title	TI	Y (default)	Y
Uniform Resource Locator	URL	Y	Y
Update Date	UP	Y	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 TI.
- (2) Appends /BI to the terms created by SELECT.
- (3) Extracts first author, publication year, volume, and first page with a truncation symbol appended and with /RE appended to the terms created by SELECT.
- (4) SELECT HIT and ANALYZE HIT not valid with this field.
- (5) Selects or analyzes ISSN and ISBN with /SO appended to the terms created by SELECT.

## Sample Records

### DISPLAY ALL

AN 2023:417413 CABA  
DN 20230424921  
TI Adhesion characteristics of the Mycoplasma bovis ribose-phosphate pyrophosphokinase protein.  
AU Zhang YangYang; Xing XiaoYong; Wu XiaoChun; He Jian; Zhang ShengYing; Liu Jia; Wen FengQin; Pan YangYang; Bao ShiJun; Yu SiJiu; Zhang, Y. Y.; Xing, X. Y.; Wu, X. C.; He, J.; Zhang, S. Y.; Liu, J.; Wen, F. Q.; Pan, Y. Y.; Bao, S. J.; Yu, S. J.  
CS College of Veterinary Medicine, Gansu Agricultural University, Gansu, China.  
SO Zhongguo Bingyuan Shengwuxue Zazhi / Journal of Pathogen Biology (2021), Volume 16, Number 7, pp. 747-752  
ISSN: 1673-5234  
DOI: <https://doi.org/10.13350/j.cjpb.210702>  
Published by: Publishing House of Journal of Pathogen Biology, Jining  
URL (Availability):  
<https://oversea.cnki.net/kcms/detail/detail.aspx?dbcode=CJFD&filename=ZISC20210702&dbname=CJFDLAST2021>  
CY China  
DT Journal  
LA Chinese  
SL English  
ED Entered STN: 13 Oct 2023  
Last updated on STN: 13 Oct 2023  
AB Objective: To analyze the adhesion of Mycoplasma bovis ribose-phosphate pyrophosphokinase (prsA) to host cells. Methods: In accordance with the prsA gene sequence of the HB0801 strain of M. bovis in GenBank (AFM51575.1), a pair of specific primers was designed and the prsA gene of the Wuwei strain of M. bovis was amplified using PCR. The prokaryotic expression vector pET-prsA was constructed and transformed into E.coli Rosetta (DE3) competent cells. Then, expression of the recombinant protein His-prsA was induced with isopropyl  $\beta$ -D-1-thiogalactopyranoside (IPTG), and the expressed product was purified. The purified protein was used to immunize New Zealand rabbits to prepare anti-His-prsA serum. The distribution of prsA protein in M. bovis cells was then analyzed using Western blotting and indirect ELISA. Complement-mediated mycoplasmicidal activity of anti-prsA serum was analyzed using a bactericidal assay, adhesion of the prsA protein was verified using an adhesion inhibition assay. Results: SDS-PAGE indicated that the recombinant protein was successfully expressed in a soluble form, and its relative molecular mass was about 36 ku. Indirect ELISA indicated that the titer of the polyclonal antibody with respect to His-prsA was 1:24 000. Western blotting and ELISA indicated that the prsA protein was located in both the cytomembrane and cytoplasm of M. bovis, but it was more prevalent in the cytoplasm. The bactericidal assay indicated that anti-His-prsA serum had potent mycoplasmicidal activity, with mycoplasmicidal action of 42.7%. An adhesion inhibition assay indicated that adhesion of M. bovis to host cells was significantly inhibited by anti-His-prsA rabbit serum, and the rate of inhibition was as high as 54.2%. This confirmed that the prsA protein was related to the adhesion of M. bovis to host cells. Conclusion: The prsA protein of M. bovis has excellent immunogenicity and adhesion. The current results have laid the foundation for further research on the pathogenesis of M. bovis.  
CC LL821 Prion, Viral, Bacterial and Fungal Pathogens of Animals, (New March 2000); ZZ394 Biochemistry and Physiology of Microorganisms, (New March 2000); ZZ395 Genetics and Molecular Biology of Microorganisms, (New March 2000); LL650 Animal Immunology, (New March 2000)  
SC 0I; 0V; ZA; CA; VE  
GT China  
CT adhesion; antibodies; characterization; complement; complement mediated

killing; ELISA; gene expression; nucleotide sequences; genes; genetic vectors; immunogenetics; pathogenesis; recombinant proteins; SDS-PAGE; cytoadherence; bacterial diseases; blood analysis; blood serum; polymerase chain reaction

BT Leporidae; Lagomorpha; mammals; vertebrates; Chordata; animals; eukaryotes; APEC countries; East Asia; Asia; high Human Development Index countries; upper-middle income countries; Mycoplasma; Mycoplasmataceae; Mycoplasmatales; Mollicutes; Tenericutes; Bacteria; prokaryotes; rabbits; Escherichia; Enterobacteriaceae; Enterobacteriales; Gammaproteobacteria; Proteobacteria

ST People's Republic of China; enzyme linked immunosorbent assay; DNA sequences; cloning vectors; sodium dodecyl sulfate-PAGE; cell adhesion; bacterial infections; bacterioses; bacterium; PCR; E. coli

RN 9007-36-7

ORGN rabbits; Mycoplasma bovis; White New Zealand; Escherichia coli

**DISPLAY BIB**

AN 2023:440515 CABA  
 DN 20230449192  
 TI Techno-economic analysis for cultivated meat production.  
 AU Ellersick, J. P.; Swartz, E.; Ashizawa, R.  
 CS Next Rung Technology, LLC, USA.  
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**EXPAND in the Controlled Term (/CT) Thesaurus**

=&gt; E BIOLOGICAL CONTROL+all/CT

E#	FILE	FREQUENCY	TERM
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E1	CABA	126136	BT1 pest control/CT
E2	CABA	87765	--> biological control/CT NOTE From 1983.
E3	CABA	0	UF biocontrol/CT
E4	CABA	0	UF biological pest control/CT
E5	CABA	16	NT1 augmentative biological control/CT
E6	CABA	44	NT2 parasitoid augmentation/CT
E7	CABA	39	NT2 predator augmentation/CT
E8	CABA	27	NT1 classical biological control/CT
E9	CABA	19	NT1 conservation biological control/CT
E10	CABA	5	RT IOBC/CT
E11	CABA	4817	RT bacterial insecticides/CT
E12	CABA	116576	RT biological control agents/CT
E13	CABA	92112	RT disease control/CT
E14	CABA	126386	RT disease resistance/CT
E15	CABA	21589	RT integrated control/CT
E16	CABA	2409	RT mating disruption/CT
E17	CABA	15672	RT parasitism/CT
E18	CABA	46886	RT pest resistance/CT
E19	CABA	18445	RT predation/CT
E20	CABA	463	RT release techniques/CT
E21	CABA	2120	RT sterile insect release/CT

\*\*\*\*\* END \*\*\*\*\*

12  
**CABA**

**EXPAND in the Geographic Term (/GT) Thesaurus**

=> e uk+all/gt

E#	FILE	FREQUENCY	TERM
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E1	CABA	139853	BT3 Europe/GT
E2	CABA	3055	BT2 Western Europe/GT
E3	CABA	1388	BT1 British Isles/GT
E4	CABA	272	BT1 Commonwealth of Nations/GT
E5	CABA	0	BT2 countries/GT
E6	CABA	1501	BT1 OECD Countries/GT
E7	CABA	0	BT2 countries/GT
E8	CABA	552	BT1 high income countries/GT
E9	CABA	0	BT2 countries/GT
E10	CABA	3	BT1 very high Human Development Index countries/GT
E11	CABA	189569	--> UK/GT NOTE From 1983. Descriptor was 'United Kingdom', 1983-1988.
E12	CABA	0	UF Britain/GT
E13	CABA	0	UF United Kingdom/GT
E14	CABA	0	UF United Kingdom of Great Britain and Northern Ireland/GT
E15	CABA	316	NT1 Channel Islands/GT
E16	CABA	12	NT2 Guernsey/GT
E17	CABA	58	NT2 Jersey/GT
E18	CABA	4145	NT1 Great Britain/GT
E19	CABA	24111	NT2 England/GT
E20	CABA	135	NT3 East Midlands of England/GT
E21	CABA	275	NT3 Eastern England/GT
E22	CABA	586	NT3 Northern England/GT
E23	CABA	585	NT3 South East England/GT
E24	CABA	535	NT3 South West England/GT
E25	CABA	215	NT3 West Midlands of England/GT
E26	CABA	268	NT3 Yorkshire and Lancashire/GT
E27	CABA	13340	NT2 Scotland/GT
E28	CABA	36	NT3 Eastern Scotland/GT
E29	CABA	80	NT3 Northern Scotland/GT
E30	CABA	345	NT3 Scottish Highlands and Islands/GT
E31	CABA	51	NT3 West Scotland/GT
E32	CABA	6531	NT2 Wales/GT
E33	CABA	112	NT1 Isle of Man/GT
E34	CABA	4098	NT1 Northern Ireland/GT
E35	CABA	18	RNT British Overseas Territories/GT

\*\*\*\*\* END \*\*\*\*\*

## EXPAND in the Organism (/ORGN) Thesaurus

=&gt; E DIPTEROCARPUS+ALL/ORGN

E#	FILE	FREQUENCY	TERM
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E1	CABA	3487	BT7 eukaryotes/ORGN
E2	CABA	1429050	BT6 plants/ORGN
E3	CABA	276	BT5 Spermatophyta/ORGN
E4	CABA	6607	BT4 angiosperms/ORGN
E5	CABA	112	BT3 eudicots/ORGN
E6	CABA	113	BT2 Malvales/ORGN
E7	CABA	1500	BT1 Dipterocarpaceae/ORGN
E8	CABA	605	--> Dipterocarpus/ORGN NOTE From 1983.
E9	CABA	121	NT1 Dipterocarpus alatus/ORGN
E10	CABA	13	NT1 Dipterocarpus baudii/ORGN
E11	CABA	5	NT1 Dipterocarpus bourdillonii/ORGN
E12	CABA	20	NT1 Dipterocarpus cornutus/ORGN
E13	CABA	28	NT1 Dipterocarpus gracilis/ORGN
E14	CABA	81	NT1 Dipterocarpus grandiflorus/ORGN
E15	CABA	3	NT1 Dipterocarpus griffithii/ORGN
E16	CABA	20	NT1 Dipterocarpus hasseltii/ORGN
E17	CABA	58	NT1 Dipterocarpus indicus/ORGN
E18	CABA	23	NT1 Dipterocarpus kerrii/ORGN
E19	CABA	2	NT1 Dipterocarpus lowii/ORGN
E20	CABA	101	NT1 Dipterocarpus turbinatus/ORGN
E21	CABA	6	NT1 Dipterocarpus warburgii/ORGN

\*\*\*\*\* END \*\*\*\*\*

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