

BIOSIS Previews[®] Quick Reference Card

BIOSIS Previews[®] combines the journal literature of *Biological Abstracts*[®] with *Biological Abstracts/RRM*[®] (*Reports, Reviews, Meetings*), and is the largest collection of biological sciences records in the world. *BIOSIS Previews* offers researchers, educators, students, and information professionals comprehensive coverage of life sciences research to meet their information needs. Updated weekly, *BIOSIS Previews* includes nearly 19 million bibliographic records dating back to 1926. Approximately 600,000 records are added each year. *BIOSIS Previews* monitors nearly 6,000 selectively covered journals as well as a collection of international meetings, conference reports, books, and patents.

1 Search

Search by Topic, Author, Source Publication, Publication Year, Address, Taxonomic Data, Major Concepts, Concept Codes, Meeting Information, or other Identifying codes. Use the drop down menu for each search box to choose the area of your search. You can limit your search by original language of publication or document type.

2 Use the drop down menu to change the relationship between each search field to AND, OR, or NOT.

3 Add additional fields for a more complex search.

4 Change the time frame and data limits of your search.

SEARCH OPERATORS

Search using AND, OR, NOT, and SAME (same sentence) to create logical search statements. Nest search operators inside parentheses. Search exact or truncated phrases inside quotations marks.

TRUNCATION SYMBOLS

Use truncation to retrieve plurals and variant spellings.

- * = zero to many characters
- ? = one character
- \$ = zero or one character

SEARCH

NAVIGATE

REFINE

PERSONALIZE

SAVE



THOMSON REUTERS

Full Record

1 Title

Titles are indexed as they appear in the source document. Foreign language titles are translated into US English and the original title is retained below the translation.

2 Authors

Up to 100 authors are indexed and searchable. If more than 100 authors are included in the source document, the first 99 names are included and the notation "et al" appears.

3 Source Information

Journal title, volume, issue, pagination, and publication date display here. The ISSN/ISBN appears below the Abstract.

4 Abstract

The English language author abstract of the source document appears here. Foreign Language abstracts are not retained. For entries from books, the abstract field contains a non-critical summary of the book. Over 90% of journal articles contain author-written abstracts.

5 Document Type

The Document Type tells you whether this record corresponds to a journal article, a meeting, a book, or a patent.

6 Language

The original language of the source document displays here.

7 Addresses

The address for the reprint author as identified by the source article is indexed and searchable. In the event that a reprint author is not identified, the first listed address is indexed and searchable.

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<< Back to results list Record 72 of 1,405 Record from BIOSIS Previews®

1 **Isolation of Ef silicatein and Ef lectin as molecular markers for sclerocytes and cells involved in innate immunity in the freshwater sponge *Ephydatia fluviatilis***

Full Text LINKS Print E-mail Add to Marked List Save to EndNote Web more options

2 **Author(s):** Funayama, Noriko (funayama@cdb.riken.jp); Nakatsukasa, Mikiko; Kuraku, Shigehiro; Takechi, Katsuki; Dohi, Mikako; Iwabe, Naoyuki; Miyata, Takashi; Agata, Kiyokazu

3 **Source:** Zoological Science (Tokyo) **Volume:** 22 **Issue:** 10 **Pages:** 1113-1122 **Published:** OCT 2005

4 **Abstract:** Sponges (phylum Porifera) have remarkable regenerative and reconstitutive abilities and represent evolutionarily the oldest metazoans. To investigate sponge stem cell differentiation, we have focused on the asexual reproductive system in the freshwater sponge *Ephydatia fluviatilis*. During germination, thousands of stem cells proliferate and differentiate to form a fully functional sponge. As an initial step of our investigation of stem cell (archeocyte) differentiation, we isolated molecular markers for two differentiated cell types: spicule-making sclerocyte cells, and cells involved in innate immunity. Sclerocyte lineage-specific Ef silicatein shares 45% to 62% identity with other sponge silicateins. As in situ hybridization of Ef silicatein specifically detects archeocytes possibly committed to sclerocytes, as well as sclerocytes with an immature or mature spicule, therefore covering all the developmental stages, we conclude that Ef silicatein is a suitable sclerocyte lineage marker. Ef lectin, a marker for the cell type involved in innate immunity, shares 59% to 65% identity with the marine sponge *Suberites domuncula* galactose-binding protein (Sd GBP) and horseshoe crab *Tachyleus tridentatus* tachylectin1/lectinL6. Since Scl GBP and tachylectin1 are known to bind to bacterial lipopolysaccharides and inhibit the growth of bacteria, Ef lectin may have a similar function and be expressed in a specialized type of cell involved in defense against invading bacteria. Ef lectin mRNA and protein are not expressed in early stages of development, but are detected in late stages. Therefore, Ef lectin may be specifically expressed in differentiating and/or differentiated cells. We suggest Ef lectin as a marker for cells that assume innate immunity in freshwater sponges.

Accession Number: PREV200600516416

5 **Document Type:** Article

6 **Language:** English

7 **Address:** Funayama, Noriko ; RIKEN Kobe, Ctr Dev Biol, Grp Evolutionary Regenerat Biol, Chuo-KU, 2-2-3 Minatogima Minami, Kobe, Hyogo 6500047, Japan

Cited by: 3
This article has been cited 3 times (from Web of Science).
Cao XP, Fu WT, Yu XJ, et al. Dynamics of spicule production in the marine sponge *Hymeniacidon perlevis* during in vitro cell culture and seasonal development in the field. CELL AND TISSUE RESEARCH 3 595-608
Schroder HC, Brandt D, Schlossmacher U, et al. Enzymatic production of biosilica glass using enzymes from sponges: basic aspects and application in nanobiotechnology (material sciences and medicine) NATURWISSENSCHAFTEN 5 339-359
Agata K, Nakajima E, Funayama N, et al. Two different evolutionary origins of stem cell systems and their molecular basis. SEMINARS IN CELL & DEVELOPMENTAL BIOLOGY 4 503-509

[view all 3 citing articles]
[Create Citation Alert]

Related Records:
Find similar records based on shared references (from Web of Science).
[view related records]

References: 28
View the bibliography of this record (from Web of Science).

Additional information
• View the Journal's Table of Contents (in Current Contents Connect)

If your institution has access to Web of Science, you may see additional information in the blue sidebar.

Click the **Cited By** number to move to the articles that have cited this article in Web of Science. The bibliographic information for the three latest articles to cite this article will automatically display with the full record.

Click **View Related Records** to find articles that have cited the same earlier materials.

Click **Create Citation Alert** to be notified when the article is cited by any new Web of Science record. Citation Alerts will remain active for one year, but can be renewed at any time.

Full Record (continued)

8 Major Concepts

The Major Concepts headings identify the main focus of the article. There are 168 Major Concept terms/phrases. Every source record has at least one Major Concept identified, but may have as many as apply to the article.

9 Concept Codes

Concept Codes are 5-digit codes used to represent broad biological concepts discussed in the source. There are 571 Concept Codes in the Indexing system. Every record has at least one Concept Code and may have as many as apply to the article. Both the 5-digit codes and their headings display and are searchable.

10 BIOSIS Indexing Fields

Assigned by BIOSIS indexers, these fields represent important themes from the source. Available Indexing fields are: Organisms, Parts, Structures, and Systems of Organisms, Diseases, Chemicals and Biochemicals, Gene Name, Sequence Data, Geological Time, Geopolitical Location, and Methods and Equipment. Indexing fields vary in years of coverage from 1993-forward.

11 Miscellaneous Descriptors

When an indexer encounters a term that does not fit into a BIOSIS indexing field, they are placed under the Miscellaneous Descriptors field.

8 Major Concepts: Immune System (Chemical Coordination and Homeostasis); Molecular Genetics (Biochemistry and Molecular Biophysics)

9 Concept Code: 02502, Genetics - General; 03506, Genetics - Animal; 10062, Biochemistry studies - Nucleic acids, purines and pyrimidines; 10066, Biochemistry studies - Lipids; 10088, Biochemistry studies - Carbohydrates; 16504, Reproductive system - Physiology and biochemistry; 25502, Development and Embryology - General and descriptive; 31000, Physiology and biochemistry of bacteria; 31500, Genetics of bacteria and viruses; 34502, Immunology - General and methods; 64006, Invertebrata: comparative, experimental morphology, physiology and pathology - Porifera; 64054, Invertebrata: comparative, experimental morphology, physiology and pathology - Arthropoda: crustacea

Suggest a correction

If you would like to improve the quality of this product by suggesting corrections, please fill out this form:

Taxonomic Data:

Super Taxa	Taxa Notes	Organism Classifier	Organism Name	Variant
Microorganisms	Bacteria, Eubacteria, Microorganisms	Bacteria [05000]	bacteria	
Crustacea, Arthropoda, Invertebrata, Animalia	Animals, Arthropods, Crustaceans, Invertebrates	Malacostraca [75112]	Tachypleus indentatus	horseshoe crab
Invertebrata, Animalia	Animals, Invertebrates	Porifera [39000]	Ephydatia fluviatilis Suberites domuncula	freshwater sponge marine sponge

Chemical Data:

Chemical Name	Variant	Details
mRNA	messenger RNA	
bacterial lipopolysaccharide		
galactose-binding protein	GBP	growth regulator
tachylectin1lectinL6		growth regulator

Gene Name Data:

Term	Details
Ephydatia fluviatilis silicateingene	
Ephydatia fluviatilis lectingene	expression

Parts and Structures Data:

Term	Organ Systems
reproductive system	reproductive system
spicule	
sclerocyte	
archeocyte	embryonic structure

11 Miscellaneous Descriptors: innate immunity, germination, asexual reproduction, stem cell differentiation

Refine and Analyze

1 Refine your Results

Use Refine to mine a set of up to 100,000 results to find the top 100 Major Concepts, Subject Areas, Source Titles, Document Types, Authors, Concept Codes, Super Taxa, Assignees, Publication Years, Languages and Literature Types.

2 Sort Results

Sort up to 100,000 records by

- Latest Date (default)
- Relevance
- Publication Year
- Source Title
- First Author
- Conference Title

3 Analyze Results

Like Refine, with Analyze you can mine a set of up to 100,000 results. With Analyze you can output the results to Microsoft® Excel to create your own graphs.

4 Output Records or Save to Endnote Web

Output records, add to your Marked List, or save to EndNote Web. Quickly print, e-mail or save to a temporary marked list (500 records maximum), or save permanently to EndNote Web (10,000 max). Click "more options" to save a range of records, adjust your saved fields, or export directly to ResearchSoft reference software (EndNote, Reference Manager, and ProCite) you have installed on your desktop.

Refine Results

Search within results for:

Major Concepts

- PHYSIOLOGY (776)
- BIOCHEMISTRY AND MOLECULAR BIOPHYSICS (605)
- CELL BIOLOGY (276)
- BLOOD AND LYMPHATICS (274)
- ENZYMOLOGY (178)
- more...

Document Types

- ARTICLE (1,116)
- MEETING (213)
- BOOK (62)
- PATENT (21)
- BOOK CHAPTER (13)
- more...

Authors

Source Titles

Subject Areas

Publication Years

Assignees

Concept Codes

Super Taxa

Languages

Literature Types

For more advanced refine options, use

Results: 1,405 Page 1 of 141 Sort by: Latest Date

1. Title: Discovery of genes involved in defense/immunity functions in a haemocytes cDNA library from *Fenneropenaeus chinensis* by ESTs annotation
Author(s): Dong, Bo; Xiang, Jian-Hai
Source: *Aquaculture* Volume: 272 Issue: 1-4 Pages: 208-215 Published: NOV 26 2007

2. Title: A cysteine-rich protein from an arthropod stabilizes clotting mesh and immobilizes bacteria at injury sites
Author(s): Matsuda, Yasuyuki; Osaki, Tsukasa; Hashii, Tomoyuki, et al
Source: *Journal of Biological Chemistry* Volume: 282 Issue: 46 Pages: 33545-33552 Published: NOV 16 2007

3. Title: The actin-binding interface of a myosin III is phosphorylated in vivo in response to signals from a circadian clock
Author(s): Cardasis, Helene L.; Stevens, Stanley M., Jr.; McClung, Scott, et al.
Source: *Biochemistry* Volume: 46 Issue: 48 Pages: 13907-13919 Published: DEC 4 2007

4. Title: Respiratory protein-generated reactive oxygen species as an antimicrobial strategy
Author(s): Jiang, Naxin; Tan, Nguan Soon; Ho, Bow, et al.
Source: *Nature Immunology* Volume: 8 Issue: 10 Pages: 1114-1122 Published: OCT 2007

5. Title: 139th Annual Meeting of the Kansas-Academy-of-Science, Salina, KS, USA, April 13 -14, 2007
Author(s): Anonymous
Meeting Information: 139th Annual Meeting of the Kansas-Academy-of-Science Salina, KS, USA
Source: *Transactions of the Kansas Academy of Science* Volume: 110 Issue: 3-4 Pages: 293-311 Published: FAL 2007

6. Title: The role of visual and chemical cues in the mating decisions of satellite male horseshoe crabs, *Limulus polyphemus*
Author(s): Schwab, Rachel L.; Brockmann, H. Jane
Source: *Animal Behaviour* Volume: 74 Issue: Part 4 Pages: 837-846 Published: OCT 2007

Results: 1,405 Show 10 per page Page 1 of 141 Sort by: Latest Date

Output Records

Step 1:

- Selected Records on page
- All records on page
- Records to

Step 2:

- Authors, Title, Source
- plus Abstract
- Full Record

Step 3:

Save To...

Personalize

1 Create Personal Profile

Any *BIOSIS Previews* user can create a personal *ISI Web of Knowledge* profile to take advantage of powerful personalization options. You can create a private user profile from the *ISI Web of Knowledge* home page (Click "Home" in the top tool bar to find the *ISI Web of Knowledge* homepage.) The user profile allows you to create:

- * Unlimited saved searches and search alerts
- * An **Endnote Web** library of up to 10,000 references

2 Save Searches and Create Search Alerts

Save any search of up to 20 sets as a Search History or an Alert. Alerts will be based on the last set in your history. You can choose the frequency and form of the alert. Alerts will remain active for 24 weeks but can be renewed at anytime. If an alert expires, it will remain as a saved search strategy in your personal profile until you delete it. Searches can also be saved as RSS feeds; simply click the **XML** icon after clicking Save History.

- * Click "Renew" to set a new expiration date for any alert.
- * Click "Settings" to turn alerts on or off.
- * Click "Open" to run the saved search
- * Click XML to set an RSS Feed

ISI Web of KnowledgeSM Take the next step

All Databases | Select a Database | BIOSIS Previews | Additional Resources

Search | Advanced Search | Search History | Marked List (0)

BIOSIS Previews®

Search History

Set	Results		Combine Sets	Delete Sets
#3	58	#2 AND #1 <small>Databases=PREVIEWS Timespan=All Years</small>	<input type="checkbox"/>	<input type="checkbox"/>
#2	536	Topic=('delaware bay') <small>Databases=PREVIEWS Timespan=All Years</small>	<input type="checkbox"/>	<input type="checkbox"/>
#1	1,405	Topic=('horseshoe crab') <small>Databases=PREVIEWS Timespan=All Years</small>	<input type="checkbox"/>	<input type="checkbox"/>

Save History / Create Alert | Open Saved History

Combine Sets: AND OR | Delete Sets: Select All, Delete

ISI Web of KnowledgeSM Take the next step

Open / Manage Saved Searches

Open from the ISI Web of Knowledge Server:
Use this box to open histories that were saved to your private account on our Server.

Display histories from: BIOSIS Previews

History Name	Product	Description	RSS Feed	Alerting	Modify Settings	Delete	Open/Run History
horseshoe crab	BIOSIS Previews		XML	Status: On Expires: 17 Jul 2008 <small>Renew</small>	<small>Settings</small>	<input type="checkbox"/>	<small>Open</small>
loris	BIOSIS Previews		XML	Status: On Expires: 17 Jul 2008 <small>Renew</small>	<small>Settings</small>	<input type="checkbox"/>	<small>Open</small>

Manage

EndNote Web

Save up to 10,000 records in your EndNote Web library. EndNote Web also allows you to add and format references in a document and search other online databases and library catalogs. References imported from ISI Web of Knowledge resources will remain marked with an EndNote Web icon and you can link back to the full record and view up-to-date citation information. EndNote Web also allows you to add and format citations to documents you are writing and perform searches of other online databases. Once you have created your EndNote Web library you can access your library at any time, either from your Web of Knowledge profile or by going to www.myendnoteweb.com and using your ISI Web of Knowledge user ID and password.

Getting Help

Click the **Help** button on any page to get detailed help on features as well as detailed search tips and examples.

Contact the Technical Help Desk for your region at:
scientific.thomsonreuters.com/support/techsupport

Contact the education team at:
scientific.thomsonreuters.com/support/training/contacttraining/

To view a recorded training module, visit:
scientific.thomsonreuters.com/support/recorded-training/

Interested in more tips and tricks?
For ongoing Web-based training, visit:
scientific.thomsonreuters.com/support/training/webtraining

The screenshot displays the EndNote Web interface. At the top, it says "Welcome, Don Sechler" and "ISI Web of Knowledge". The main header includes "EndNote Web" and "provided by ISI Web of Knowledge". Below this are navigation tabs: "My References", "Collect", "Organize", "Format", and "Options". A "Quick Search" box is on the left, and a "My References" sidebar shows a list of 121 references, including "Fuel Cell (26)", "HCCI (50)", "Thin Film (10)", "[Unfiled] (35)", and "Quick List (0)". The main area, titled "All My References", shows a table of references with columns for "Author", "Year", and "Title". The table lists several references from 2007, such as "Fuel cell aircraft set too take to the skies" and "Variable-valve HCCI: A challenge of timing".

Author	Year	Title
	2007	Fuel cell aircraft set too take to the skies Power Engineer ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0
	2007	Variable-valve HCCI: A challenge of timing Mechanical Engineering ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0
Aleiferis, P. G.	2007	Avial fuel stratification of a homogeneous charge compression ignition (HCCI) engine International Journal of Vehicle Design ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0
Andrae, J. C. G.	2007	Autoignition of toluene reference fuels at high pressures modeled with detailed chemical kinetics Combustion and Flame ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 1
Anis, A.	2007	Preparation, electrical, and dielectric characterization of crosslinked polyvinyl alcohol-phosphotungstic acid nanocomposites Materials and Manufacturing Processes ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0
Asamoto, M.	2007	Fabrication of BaCa _{0.8} Y _{0.2} O ₃ dense film on perovskite-type oxide electrode substrates Journal of the European Ceramic Society ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0
Bin Yoo, K.	2007	Cathodic overpotential of La _{0.6} Sr _{0.4} CoO ₃ and its composite cathodes LSC-LSGM on LaGaO ₃ -based fuel cell Journal of the European Ceramic Society ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0
Bouaceur, R.	2007	Kinetic modelling of a surrogate diesel fuel applied to 3D auto-ignition in HCCI engines International Journal of Vehicle Design ISI Web of Knowledge SM Source Record, Related Records, Times Cited: 0