

# BIOLOGICAL ABSTRACTS®

POWERED BY ISI WEB OF KNOWLEDGE<sup>SM</sup>



REUTERS/Christian Charisius

## WHAT IS BIOLOGICAL ABSTRACTS?

*Biological Abstracts*® offers researchers, educators, students, and information professionals comprehensive coverage of life sciences research with specialized indexing. *Biological Abstracts* includes over 12 million bibliographic records dating back to 1926, from over 4,200 selectively covered journals. Approximately 350,000 records are added each year.



THOMSON REUTERS™

## SEARCH

1. Search by Topic, Author, Source Publication, Publication Year, Address, Taxonomic Data, Major Concepts, Concept Codes, 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 of your search.

ISI Web of Knowledge<sup>SM</sup> Take the next step

Sign In | My EndNote Web | My ResearchID | My Citation Alerts | My Journal List | My Saved Searches

All Databases | Select a Database | Biological Abstracts | Additional Resources

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

Biological Abstracts®

Search for:

1. "horseshoe crab" in Topic

2. AND in Author

3. AND in Publication Name

Example: Journal of Wildlife Management OR Wildlife Research

Add Another Field >>

Search Clear

Current Limits: [hide Limits and Settings] (To save these permanently, sign in or register.)

4. Timespan: All Years (updated 2008-12-08)

From 1926-1944 to 2008 (default is all years)

Databases: Biological Abstracts-1926-present

Discover Abstracts

Access your library

- Over 4 countries
- Over 3 annual records
- Available record
- View it
- Transfer

Customize

Sign In | Register

- Save a reference
- Web-integrated
- Save it
- Create
- Choose
- View it

My Research

- What is

Topic

Title

Author

Publication Name

Address

Year Published

Taxonomic Data

Major Concepts

Concept Codes

Chemical and Biochemical

Identifying Codes

Language

Literature Type

Taxa Notes

## 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

## FULL RECORD

## 1. TITLES

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 appears below the Address field.

## 4. ABSTRACT

The English language author abstract of the source document appears here. Foreign Language abstracts are not retained. Over 90% of journal articles contain author-written abstracts.

## 5. LANGUAGE

The original language of the source document displays here.

## 6. 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.

Biological Abstracts®

<< Back to results list | Record 1 of 1 | Record from Biological Abstracts®

1. Molecular cloning and characterisation of a thioester-containing alpha 2-macroglobulin (alpha 2-M) from the haemocytes of mud crab *Scylla serrata*

2. Author(s): Vasanthan, Bakaratnam; Lin, Yong-Chi; Qi, Chi-Fong; Chiu, Tzu-Ting; Chen, Jiann-Chu [jchen@mail.nhu.edu.tw]

3. Source: Fish & Shellfish Immunology Volume: 22 Issue: 1-2 Pages: 115-130 Published: JAN-FEB 2007

4. Abstract: Molecular approaches were used to clone thioester-containing alpha 2-macroglobulin (alpha 2-M) genes in the haemocytes of mud crab *Scylla serrata*. The full length sequence of alpha 2-M was determined by RT-PCR, cloning and sequencing of overlapping PCR and rapid amplification of cDNA ends (RACE) method. Analysis of the nucleotide sequence revealed that the alpha 2-M cDNA clone consists of 5491 bp with an open reading frame (ORF) of 4986 bp encoding a protein of 1662 amino acids with 22 residues signal sequence. The calculated molecular mass of the mature protein is 184.2 kDa with an estimated pI of 4.1. The S. serrata alpha 2-M sequence contains putative functional domains including a Cysteine protease region, a tail region, and a receptor-binding domain which are present in other invertebrate and vertebrate alpha 2-Ms. Sequence comparison showed that alpha 2-M deduced amino acid sequence of S. serrata has an overall similarity of 60% and 48% to that of Japanese shrimp *Macrobrachium japonicus* and American horseshoe crab *Limulus polyphemus*, respectively. Phylogenetic analysis revealed that S. serrata alpha 2-M is closely related to other arthropod alpha 2-M, and displays the highest similarity to M. japonicus alpha 2-M. The alpha 2-M was mainly expressed in haemocytes. Quantitative real-time RT-PCR analysis showed that alpha 2-M mRNA transcript in haemocytes of S. serrata increased significantly in 24 h- and 48 h-post lipopolysaccharide (LPS) injection. (c) 2006 Elsevier Ltd. All rights reserved.

5. Accession Number: BACD200600453678

6. Document Type: Article

Language: English

Address: Chen, Jiann-Chu; Nat Taiwan Ocean Univ, Coll Life Sci, Dept Aquaculture, Chung 202, Taiwan

ISSN: 1050-4648

Cited by: 4

This article has been cited 4 times (from Web of Science).

Padhi A, Suchman MA, Varghese B. Dynamic evolutionary pattern of alpha2-macroglobulin in a model organism, the rainbowfish (*Oryzias latipes*). MOLECULAR IMMUNOLOGY 11: 3313-3318 JUN 2007

Rosa MD, Parazolis LM, Barto MA. Comparison of the structure and adjacent regions of the alpha2-macroglobulin from different South Atlantic crustaceans. FISH & SHELLFISH IMMUNOLOGY 2: 257-269 FEB 2007

Lin YC, Vasanthan B, Chen JC. Molecular cloning and phylogenetic analysis on alpha 2-macroglobulin (alpha 2-M) of white shrimp *Litopenaeus vannamei*. DEVELOPMENTAL AND COMPARATIVE IMMUNOLOGY 4: 317-329

[ view all citing articles ]

Create Citation Alert

Related Records:

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)

## 7. 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.

## 8. 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.

## 9. BIOLOGICAL ABSTRACTS INDEXING FIELDS

Assigned by Biological Abstracts 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.

## 10. MISCELLANEOUS DESCRIPTORS

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

**7 Major Concepts:** Methods and Techniques; Molecular Genetics (Biochemistry and Molecular Biophysics)

**8 Concept Code:** 03502, Genetics - General; 03506, Genetics - Animal; 10062, Biochemistry studies - Nucleic acids, purines and pyrimidines; 10064, Biochemistry studies - Proteins, peptides and amino acids; 10066, Biochemistry studies - Lipids; 10068, Biochemistry studies - Carbohydrates; 64054, Invertebrata: comparative, experimental morphology, physiology and pathology - Arthropoda: crustacea; 64060, Invertebrata: comparative, experimental morphology, physiology and pathology - Arthropoda: chelicerata

**9 Taxonomic Data:**

Super Taxa	Taxa Notes	Organism Classifier	Organism Name	Variant
Crustacea, Arthropoda, Invertebrata, Animalia	Animals, Arthropods, Crustaceans, Invertebrates	Malacostraca [75112]	Scylla serrata	mud crab
			Marsupenaeus japonicus	kuruma shrimp
Chelicerata, Arthropoda, Invertebrata, Animalia	Animals, Arthropods, Chelicerates, Invertebrates	Merostomata [75404]	Limulus polyphemus	horseshoe crab

**10 Chemical Data:**

Chemical Name
alpha-2-macroglobulin
open reading frame
lipopolysaccharide
complementary DNA
amino acid
thioester

**Methods and Equipment Data:**

Term	Variant	Details
RT-PCR	reverse transcriptase-polymerase chain reaction	laboratory techniques, genetic techniques
molecular cloning		laboratory techniques, genetic techniques

**Parts and Structures Data:**

Term
hematocyte

**Miscellaneous Descriptors:** nucleotide sequence

## 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, Authors, Concept Codes, Super Taxa, 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

## 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.

**Biological Abstracts®**

Results: 965

Page 1 of 97

Sort by: Latest Date

**Refine Results**

Search within results for: [Search]

**Major Concepts**

- PHYSIOLOGY (507)
- BIOCHEMISTRY AND MOLECULAR BIOPHYSICS (504)
- BLOOD AND LYMPHATICS (200)
- CELL BIOLOGY (194)
- ENDOCRINOLOGY (194)
- more options / values...

**Authors**

- KIMABATA, SHUNICHIRO (87)
- IKANAKA, SADAKO (29)
- IKANAKA, S (30)
- KIKUCHI, R (28)
- HO, SHOU (22)
- more options / values...

**Source Titles**

**Subject Areas**

**Publication Years**

**Concept Codes**

**4** [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**1** [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**2** [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**3** [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**1.** Title: Head-head and head-tail interaction: A general mechanism for switching off myosin II activity in cells.  
Author(s): Jung, Heon Guk; Somatov, Satoru; Iwabe, Mitsuo, et al.  
Source: *Molecular Biology of the Cell* Volume: 19 Issue: 8 Pages: 3234-3242 Published: AUG 2008  
[Full Text](#)

**2.** Title: Rhythms of locomotion expressed by *Limulus polyphemus*, the American horseshoe crab: II. Relationship to circadian rhythms of visual sensitivity.  
Author(s): Watson, Winsor H, II; Bedford, Lisa; Chabot, Christopher C.  
Source: *Biological Bulletin (Woods Hole)* Volume: 215 Issue: 1 Pages: 46-56 Published: AUG 2008  
[Full Text](#)

**3.** Title: Rhythms of locomotion expressed by *Limulus polyphemus*, the American horseshoe crab: I. Synchronization by artificial tides.  
Author(s): Chabot, Christopher C.; Shimizu, Stephen J.; Watson, Winsor H, II  
Source: *Biological Bulletin (Woods Hole)* Volume: 215 Issue: 1 Pages: 34-45 Published: AUG 2008  
[Full Text](#)

**4.** Title: Two-domain arginine kinase from the deep-sea clam *Calyptogena kikaii*: Evidence of two active domains.  
Author(s): Uda, Kouji; Yamamoto, Ken-ichi; Iwasaki, Naoki; Mizoguchi, Minayuki, et al.  
Source: *Comparative Biochemistry and Physiology Part B: Biochemistry & Molecular Biology* Volume: 151 Issue: 2 Pages: 176-182 Published: OCT 2008  
[Full Text](#)

**5.** Title: A novel beta-defensin structure: A potential strategy of big defensin for overcoming resistance by gram-positive bacteria.  
Author(s): Kouno, Takahide; Fujitani, Naoki; Mizoguchi, Minayuki, et al.  
Source: *Biochemistry* Volume: 47 Issue: 40 Pages: 10611-10619 Published: OCT 7 2008  
[Full Text](#)

**6.** Title: Membrane pore formation by porraxin proteins from *Limulus*, the American horseshoe crab.  
Author(s): Harrington, John M.; Chou, Hui-Ting; Gulemann, Thomas, et al.

Results: 965 [Show 10 per page]

Page 1 of 97

Sort by: [Sort]

**4** [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**Step 1:** [Selected Records on page] [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**Step 2:** [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

**Step 3:** [How do I export to bibliographic management software?] [Print](#) [E-mail](#) [Add to Marked List](#) [Save to EndNote Web](#) [Save to EndNote, RefMan, ProCite](#) more options

[Save to other Reference Software](#) [Save](#)



## PERSONALIZE

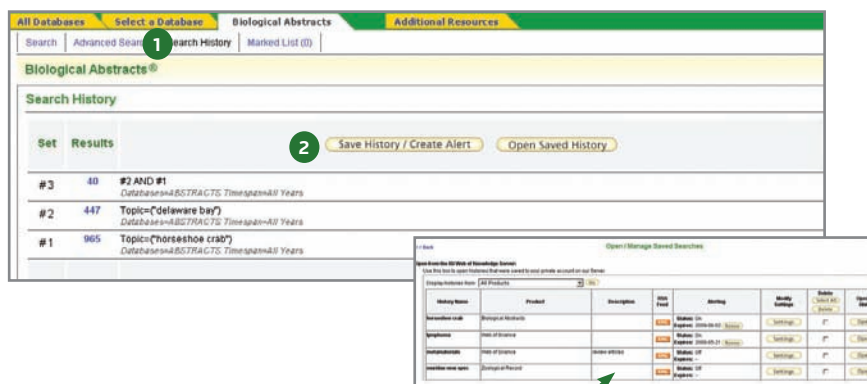
### 1. CREATE PERSONAL PROFILE

Any *Biological Abstracts* 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.

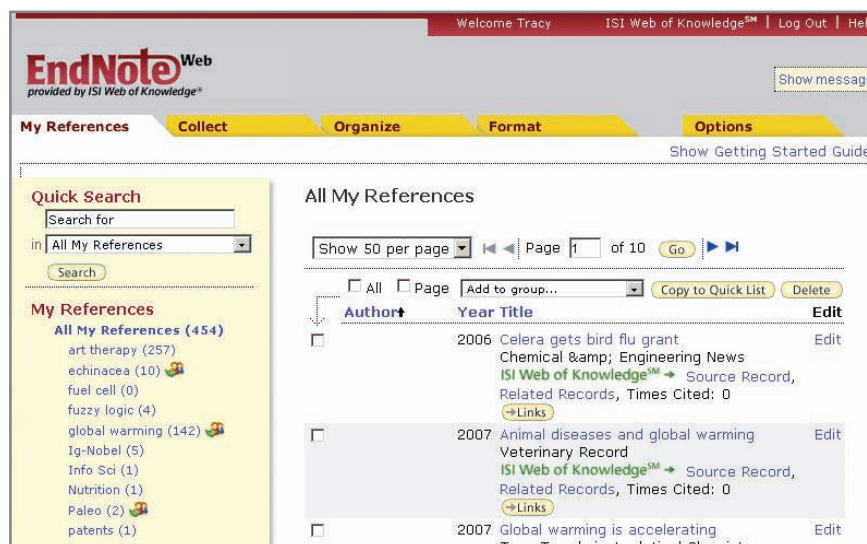


- Click "Renew" to set a new expiration date for any alert.
- Click "Settings" to turn alerts on or off.
- Click "Open" to run the saved search
- Click XML to set an RSS Feed

## 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](http://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:  
[science.thomsonreuters.com/support/techsupport](http://science.thomsonreuters.com/support/techsupport)

Contact the education team at:  
[science.thomsonreuters.com/info/contacttraining/](http://science.thomsonreuters.com/info/contacttraining/)

To view a recorded training module, visit:  
[science.thomsonreuters.com/training/](http://science.thomsonreuters.com/training/)

Interested in more tips and tricks?  
For ongoing Web-based training, visit:  
[science.thomsonreuters.com/training/ba](http://science.thomsonreuters.com/training/ba)

## Scientific Head Offices

### Americas

Philadelphia +1 800 336 4474  
+1 215 386 0100

### Europe, Middle East and Africa

London +44 20 7433 4000

### Asia Pacific

Singapore +65 6775 5088  
Tokyo +81 3 5218 6500

For a complete office list visit:

[science.thomsonreuter.com/contact](http://science.thomsonreuter.com/contact)

