

# TaxTree Explorer Taxonomy



Enzyme Database - BRENDA - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

http://www.brenda-enzymes.info/

Erste Schritte Aktuelle Nachrichten BRENDA™ Setup Wiz...

**BRENDA**  
The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of Bioinformatics

SEARCH-Navigator

- close all open all
- Nomenclature
- Reaction & Specificity
- Functional Parameters
- Organism related Information
- Enzyme Structure
- Isolation & Preparation
- Stability
- Disease & References
- Application & Engineering

Quick search

Fulltext search

Advanced search

Substructure search

**TaxTree Explorer**

EC Explorer

Sequence Search

Genome Explorer

Ontology Explorer

Download

Introduction/References

News

Contact/Team/Errors

Jobs

Copyright

Related Links

Help

BRENDA input

**BRENDA Professional**  
Commercial Version

Release 2008.1

EC-Number Enzyme Name **Organism** Protein Full text Advanced Search

Search Display 10 entries

Latest BRENDA update 12/2007

Nomenclature	Reaction & Specificity	Functional Parameters
Enzyme Names EC	Pathway	Km Value
Organism	Posttranslational Modification	Engineering Application
Oxidation Stability Storage Stability		

Webmaster: **Maurice Scheer**  
n.scheer@tu-bs.de

For access to all features of the website Javascript must be activated, frames enabled and Java (at least version 1.4) has to be installed

Fertig

Start

Enzyme Database - B... TOSHIBA (F:) Short tutorial - Open... DE 09:30



## TaxTree Explorer:

Provides a template to search in the Taxonomy Tree database (NCBI) which contains the names of all organisms, that are represented in the genetic databases with at least one nucleotide or protein sequence.

Enzyme Database - BRENDA - Mozilla Firefox

http://www.brenda-enzymes.info/

Enzyme Database - BRENDA

**BRENDA**  
The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of Bioinformatics

**SEARCH-Navigator**  
close all open all

- Nomenclature
- Reaction & Specificity
- Functional Parameters
- Organism related Information
- Enzyme Structure
- Isolation & Preparation
- Stability
- Disease & References
- Application & Engineering

Quick search  
Fulltext search  
Advanced search  
Substructure search  
TaxTree Explorer  
EC Explorer  
Sequence Search  
Genome Explorer  
Ontology Explorer  
Download

Introduction/References  
News  
Contact/Team/Errors  
Jobs  
Copyright  
Related Links  
Help  
BRENDA input  
**BRENDA Professional**  
Commercial Version

Release 2008.1

organism: (scientific name) contains [ ] use AND (NOT) or OR  
synonym type: all types of synonyms [ ]  
synonym: contains [ ] use AND (NOT) or OR  
ID: [ ]  
rank: all types of ranks [ ]

Taxonomy  
back to BRENDA

Example

Search

5 search fields:  
- organism (scientific name)  
- synonym type  
- synonym  
- ID  
- rank  
with different search modes

Fertig

Start LEO Ergebnisse für "p... Enzyme Database - B... http://www.brenda-e... TOSHIBA (F:) Short tutorial - Open... DE 14:07

Enzyme Database - BRENDA - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

http://www.brenda-enzymes.info/ Google

Erste Schritte Aktuelle Nachrichten BRENDA™ Setup Wiz...

Enzyme Database - BRENDA BRENDA: Entry of DNA-directed DNA ...

BRENDA home  
login  
history  
All enzymes

**BRENDA**  
The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of Bioinformatics

**SEARCH-Navigator**  
close all open all  
Nomenclature  
Reaction & Specificity  
Functional Parameters  
Organism related Information  
Enzyme Structure  
Isolation & Preparation  
Stability  
Disease & References  
Application & Engineering

Quick search  
Fulltext search  
Advanced search  
Substructure search  
TaxTree Explorer  
EC Explorer  
Sequence Search  
Genome Explorer  
Ontology Explorer  
Download


Introduction/References  
News  
Contact/Team/Errors  
Jobs  
Copyright  
Related Links  
Help  
BRENDA input  
**BRENDA Professional**  
Commercial Version

Release 2008.1

organism: (scientific name) contains use AND (NOT) or OR  
synonym type: all types of synonyms  
synonym: contains use AND (NOT) or OR  
ID: =  
rank: all types of ranks **Search**

Taxonomy  
back to BRENDA

Example

For an explanation click on  to start the example.

Fertig

Start LEO Ergebnisse für "p... Enzyme Database - B... http://www.brenda-e... TOSHIBA (F:) Short tutorial - Open... DE 14:07

Enzyme Database - BRENDA - Mozilla Firefox

http://www.brenda-enzymes.info/

Erste Schritte Aktuelle Nachrichten BRENDA™ Setup Wiz...

Enzyme Database - BRENDA BRENDA: Entry of DNA-directed DNA ...

BRENDA home  
login  
history  
All enzymes

**SEARCH-Navigator**  
close all open all  
Nomenclature  
Reaction & Specificity  
Functional Parameters  
Organism related Information  
Enzyme Structure  
Isolation & Preparation  
Stability  
Disease & References  
Application & Engineering

Quick search  
Fulltext search  
Advanced search  
Substructure search  
TaxTree Explorer  
EC Explorer  
Sequence Search  
Genome Explorer  
Ontology Explorer  
Download

Introduction/References  
News  
Contact/Team/Errors  
Jobs  
Copyright  
Related Links  
Help  
BRENDA input  
BRENDA Professional  
Commercial Version

Release 2008.1

**BRENDA**  
The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of  
Bioinformatics

organism: contains Methanobacteria use AND (NOT) or OR  
synonym type: all types of synonyms  
synonym: contains use AND (NOT) or OR  
ID: =  
rank: all types of ranks

**Taxonomy**  
back to BRENDA

**Search**

**Details**  
**Methanobacteria**  
2905 aa sequences of Methanobacteria  
NCBI Taxonomy ID  
183925  
**Links to enzymes in BRENDA**  
Found 149 enzymes (distinct EC numbers) linked to this organism:  
1.1.1.1 Show enzyme data  
Synonyms  
1. Archaeobacteria  
2. Archaeobacteria Murray 1988  
3. Methanobacteria Boone 2002

**Condensed Tree View**  
Taxonomy 0  
cellular organisms  
Archaea (superkingdom)  
Euryarchaeota (phylum)  
Methanobacteria (class)

**Tree View**  
10 hits found in tree  
Taxonomy 0  
cellular organisms  
Archaea (superkingdom)  
Crenarchaeota (phylum)  
environmental samples  
Euryarchaeota (phylum)  
Archaeoglobi (class)  
environmental samples  
Halobacteria (class)  
Methanobacteria (class)  
Methanobacteriales (order)  
environmental samples  
Methanobacteriales archaeon enrichment clone M65 (species)  
uncultured Methanobacteriales archaeon (species)  
unidentified Methanobacteriales (species)  
Methanobacteriaceae (family)  
environmental samples  
Methanobacteriaceae archaeon enrichment clone M13 (species)  
uncultured Methanobacteriaceae archaeon (species)

**Results**  
10 different results found  
1. Methanobacteria  
2. Methanobacteriaceae  
3. Methanobacteriaceae archaeon enrichment clone M13  
4. Methanobacteriales  
5. Methanobacteriales archaeon enrichment clone M65  
6. unclassified Methanobacteriaceae  
7. unclassified Methanobacteriales  
8. uncultured Methanobacteriaceae archaeon  
9. uncultured Methanobacteriales archaeon  
10. unidentified Methanobacteriales

Fertig

Start LEO Ergebnisse für "p... Enzyme Database - B... Short tutorial - Open... DE 14:21

The BRENDA taxonomy displays 5 different areas:

- Search
- Details
- Results
- Condensed Tree View
- Tree View

Enzyme Database - BRENDA - Mozilla Firefox

http://www.brenda-enzymes.info/

Erste Schritte Aktuelle Nachrichten BRENDA™ Setup Wiz...

Enzyme Database - BRENDA

BRENDA home  
login  
history  
All enzymes

**BRENDA**  
The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of Bioinformatics

**SEARCH Navigator**  
close all open all  
Nomenclature  
Reaction & Specificity  
Functional Parameters  
Organism related Information  
Enzyme Structure  
Isolation & Preparation  
Stability  
Disease & References  
Application & Engineering

Quick search  
Fulltext search  
Advanced search  
Substructure search  
TaxTree Explorer  
EC Explorer  
Sequence Search  
Genome Explorer  
Ontology Explorer  
Download

Introduction/References  
News  
Contact/Team/Errors  
Jobs  
Copyright  
Related Links  
Help  
BRENDA input  
**BRENDA Professional**  
Commercial Version

Release 2008.1

Ergebnisse für "p... Enzyme Database - B... Short tutorial - Open... DE 14:21

organism: (scientific name) contains Methanobacteria use AND (NOT) or OR  
synonym type: all types of synonyms  
synonym: contains use AND (NOT) or OR  
ID: =  
rank: all types of ranks

**Taxonomy**  
back to BRENDA

**Search**

**Details**  
**Methanobacteria**  
2905 aa sequences of Methanobacteria  
NCBI Taxonomy ID: 183925  
**Links to enzymes in BRENDA**  
Found 149 enzymes (distinct EC numbers) linked to this organism:  
1.1.1.1 Show enzyme data  
Synonyms:  
1. Archaeobacteria  
2. Archaeobacteria Murray 1988  
3. Methanobacteria Boone 2002

**Results**  
10 different results found  
1. Methanobacteria  
2. Methanobacteriaceae  
3. Methanobacteriaceae archaeon enrichment clone M13  
4. Methanobacteriales  
5. Methanobacteriales archaeon enrichment clone M65  
6. unclassified Methanobacteriaceae  
7. unclassified Methanobacteriales  
8. uncultured Methanobacteriaceae archaeon  
9. uncultured Methanobacteriales archaeon  
10. unidentified Methanobacteriales

**Condensed Tree View**  
Taxonomy 0  
cellular organisms  
Archaea (superkingdom)  
Euryarchaeota (phylum)  
Methanobacteria (class)

**Results**

Enzyme Database - BRENDA - Mozilla Firefox

http://www.brenda-enzymes.info/

Enzyme Database - BRENDA

**BRENDA**  
The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of Bioinformatics

SEARCH-Navigator

- close all
- open all
- Nomenclature
- Reaction & Specificity
- Functional Parameters
- Organism related Information
- Enzyme Structure
- Isolation & Preparation
- Stability
- Disease & References
- Application & Engineering

Quick search

Fulltext search

Advanced search

Substructure search

TaxTree Explorer

EC Explorer

Sequence Search

Genome Explorer

Ontology Explorer

Download

Introduction/References

News

Contact/Team/Errors

Jobs

Copyright

Related Links

Help

BRENDA input

**BRENDA Professional**  
Commercial Version

Release 2008.1

organism: contains Methanobacteria use AND (NOT) or OR  
(scientific name)

synonym type: all types of synonyms

synonym: contains use AND (NOT) or OR

ID: =

rank: all types of ranks

Taxonomy  
back to BRENDA

Example

Search

Details

**Methanobacteria**

2905 aa sequences of Methanobacteria

NCBI Taxonomy ID  
183925

**Links to enzymes in BRENDA**

Found 149 enzymes (distinct EC numbers) linked to this organism:

1.1.1.1 Show enzyme data

Synonyms

1. Archaeobacteria
2. Archaeobacteria Murray 1988
3. Methanobacteria Boone 2002

**Results**

10 different results found

1. Methanobacteria
2. Methanobacteriaceae
3. Methanobacteriaceae archaeon enrichment clone M13
4. Methanobacteriales
5. Methanobacteriales archaeon enrichment clone M65
6. unclassified Methanobacteriaceae
7. unclassified Methanobacteriales
8. uncultured Methanobacteriaceae archaeon
9. uncultured Methanobacteriales archaeon
10. unidentified Methanobacteriales

**Tree View**

10 hits found in tree

- Taxonomy 0
  - cellular organisms
    - Archaea (superkingdom)
      - Crenarchaeota (phylum)
        - environmental samples
          - Euryarchaeota (phylum)
            - Archaeoglobi (class)
              - environmental samples
                - Halobacteria (class)
                  - Methanobacteria (class)
                    - Methanobacteriales (order)
                      - environmental samples
                        - Methanobacteriales archaeon enrichment clone M65 (species)
                        - uncultured Methanobacteriales archaeon (species)
                        - unidentified Methanobacteriales (species)
                      - Methanobacteriaceae (family)
                        - environmental samples
                          - Methanobacteriaceae archaeon enrichment clone M13 (species)
                          - uncultured Methanobacteriaceae archaeon (species)

If you click on a term in the result list or in one of the ontology trees all **details** of a result (aa-sequences, ID, found enzymes, and synonyms) are shown.

Fertig

Start

LEO Ergebnisse für "p..."

Enzyme Database - B...

Short tutorial - Open...

DE

14:21



Enzyme Database - BRENDA - Mozilla Firefox

http://www.brenda-enzymes.info/

Erste Schritte Aktuelle Nachrichten BRENDA™ Setup Wiz...

# BRENDA

The Comprehensive Enzyme Information System

TU Braunschweig  
Dept. of  
Bioinformatics

Search

### Condensed Tree View

Taxonomy 0

- cellular organisms
- Archaea (superkingdom)
- Euryarchaeota (phylum)
- Methanobacteria (class)

### Tree View

10 hits found in tree

- Taxonomy 0
- cellular organisms
- Archaea (superkingdom)
- Crenarchaeota (phylum)
- environmental samples
- Euryarchaeota (phylum)
- Archaeoglobi (class)
- environmental samples
- Halobacteria (class)
- Methanobacteria (class)
- Methanobacteriales (order)
- environmental samples
- Methanobacteriales archaeon enrichment clone M65 (species)
- uncultured Methanobacteriales archaeon (species)
- unidentified Methanobacteriales (species)
- Methanobacteriaceae (family)
- environmental samples
- Methanobacteriaceae archaeon enrichment clone M13 (species)
- uncultured Methanobacteriaceae archaeon (species)

1.1.1.1

Synonyms

1. Archaeobacteria
2. Archaeobacteria Murray 1988
3. Methanobacteria Boone 2002

### Results

10 different results found

1. Methanobacteria
2. Methanobacteriaceae
3. Methanobacteriaceae archaeon enrichment clone M13
4. Methanobacteriales
5. Methanobacteriales archaeon enrichment clone M65
6. unclassified Methanobacteriaceae
7. unclassified Methanobacteriales
8. uncultured Methanobacteriaceae archaeon
9. uncultured Methanobacteriales archaeon
10. unidentified Methanobacteriales

Substructure search

TaxTree Explorer

EC Explorer

Sequence Search

Genome Explorer

Ontology Explorer

Download

Introduction/References

News

Contact/Team/Errors

Jobs

Copyright

Related Links

Help

BRENDA input

**BRENDA Professional**  
Commercial Version

Release 2008.1

Fertig

Start

LEO Ergebnisse für "p..."

Enzyme Database - B...

Short tutorial - Open...

DE

14:21

The "Tree View" presents an overview where results (terms marked with orange background) are located in the tree. The view is similar to a file browser. You can open and close "folders" by clicking on the + or -.

**SEARCH-Navigator**

close all open all

- Nomenclature
- Reaction & Specificity
- Functional Parameters
- Organism related Information
- Enzyme Structure
- Isolation & Preparation
- Stability
- Disease & References
- Application & Engineering

**Taxonomy**

back to BRENDA

organism: (scientific name) contains Methanobacteria use AND (NOT) or OR

synonym type: all types of synonyms

synonym: contains use AND (NOT) or OR

ID: =

rank: all types of ranks

**Search**

- Quick search
- Fulltext search
- Advanced search
- Substructure search
- TaxTree Explorer
- EC Explorer
- Sequence Search
- Genome Explorer
- Ontology Explorer
- Download

Introduction/References

News

Contact/Team/Errors

Jobs

Copyright

Related Links

Help

BRENDA input

**BRENDA Professional**

Commercial Version

Release 2008.1

**Details**

**Methanobacteria**

2905 aa sequences of Methanobacteria

NCBI Taxonomy ID: 183925

**Links to enzymes in BRENDA**

Found 149 enzymes (distinct EC numbers) linked to this organism.

1.1.1.1 Show enzyme data

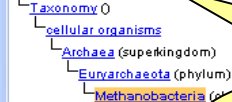
Synonyms

- Archaeobacteria
- Archaeobacteria Murray 1988
- Methanobacteria Boone 2002

**Results**

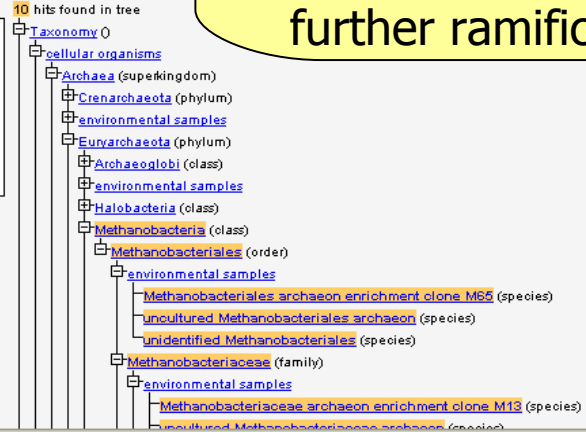
- 10 different results found
- Methanobacteria
  - Methanobacteriaceae
  - Methanobacteriaceae archaeon enrichment clone M13
  - Methanobacteriales
  - Methanobacteriales archaeon enrichment clone M65
  - unclassified Methanobacteriaceae
  - unclassified Methanobacteriales
  - uncultured Methanobacteriaceae archaeon
  - uncultured Methanobacteriales archaeon
  - unidentified Methanobacteriales

**Condensed Tree View**



The "Condensed Tree View" is a shortened version of the "Tree View" for only one result and without any further ramifications.

**Tree View**



Ideas for *BRENDA's*  
improvement welcome !!!