

EMBL-Bank

07.07.2005
Max Flöttmann



EMBL-Bank

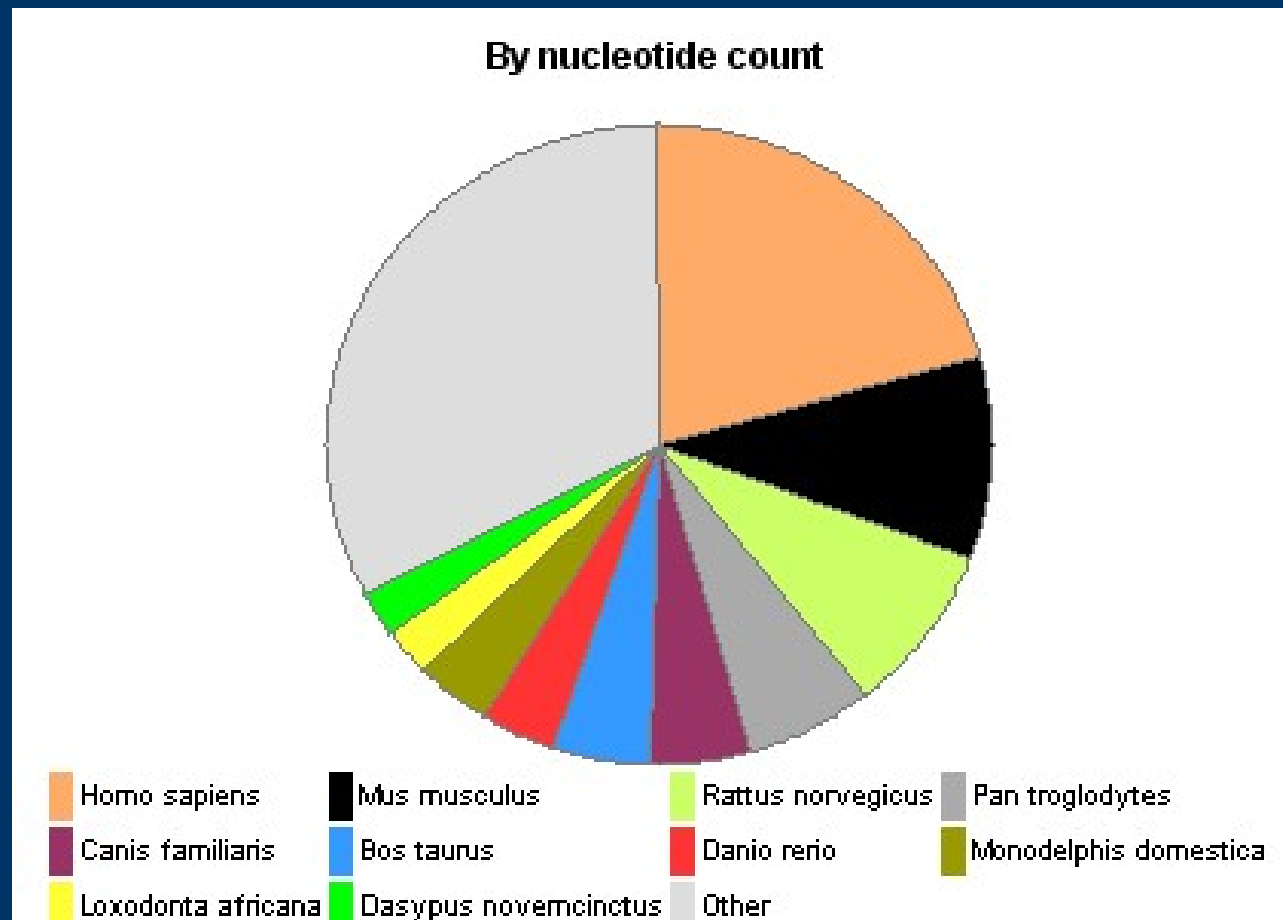
- EMBL-Bank
 - Inhalt
 - Wachstum
 - Verwaltung
- Betreiber der EMBL-Bank
- Benutzung
 - Abfrage von Daten
 - Einpflegen von Daten



EMBL-Bank

- größte Nucleotidsequenz-Datenbank Europas z.Z. ca. 54.000.000 Einträge
 - Ständiger Abgleich mit NCBI und DDBJ
 - Die enthaltenen Sequenzen werden **allen Wissenschaftlern frei zur Verfügung** gestellt
 - **Alle Einträge bleiben erhalten**, auch wenn sie nachträglich verbessert werden bleiben sie erreichbar (EMBL-SVA)
 - Einträge werden **nicht Überprüft**
-
-

Anteile der in der EMBL-Bank enthaltenen Sequenzen



Inhalt der Einträge

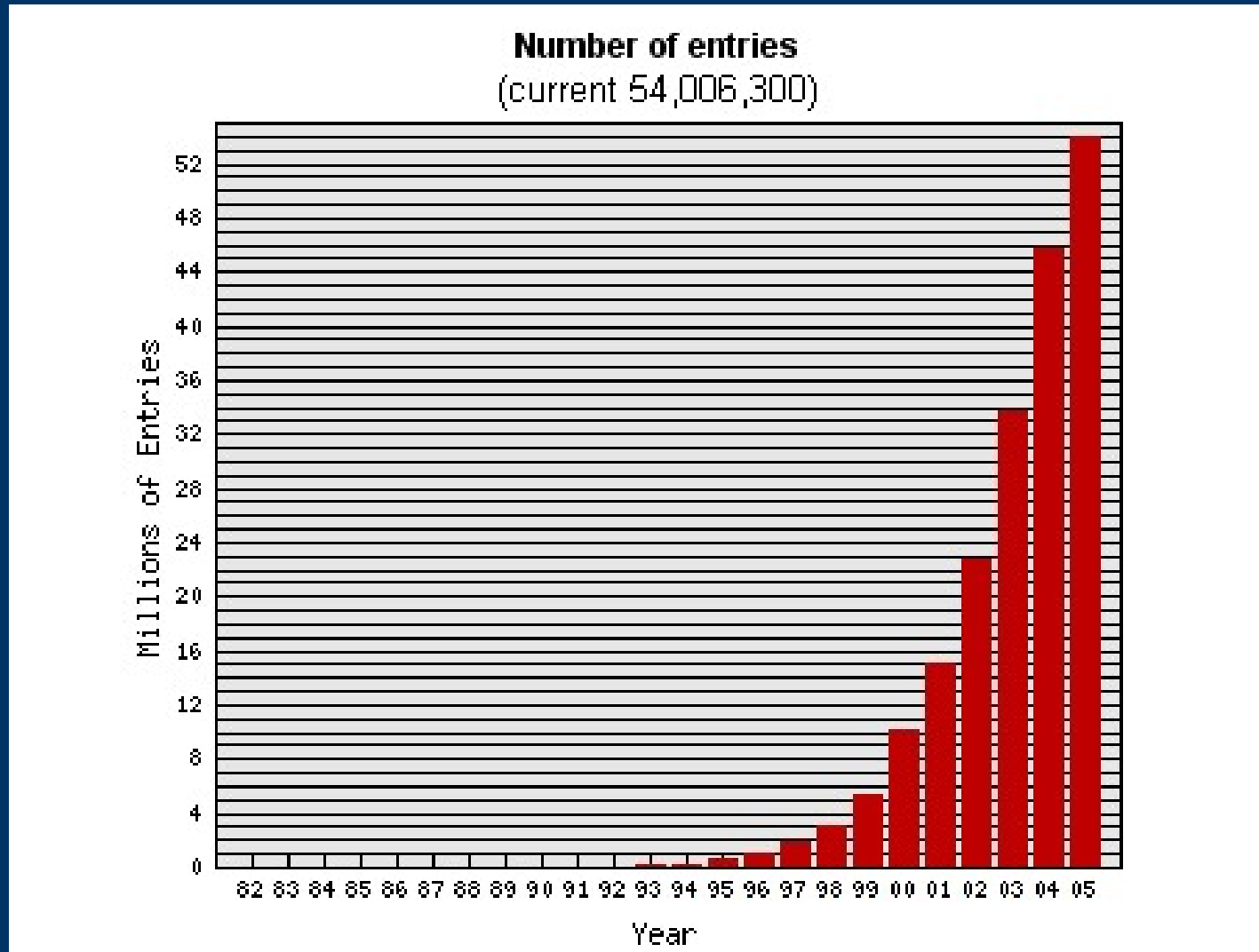
- Accession Number
 - Name des Eintrags
 - Molekül (mRNA, tRNA, ...)
 - Daten (erster Eintrag, letztes Update, Versionsnummer)
 - Beschreibung und Keywords
 - Referenzen zu anderen Datenbanken
 - Autoren
 - Sequenz
 - uvm...
-
-

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Wachstum der EMBL-Bank



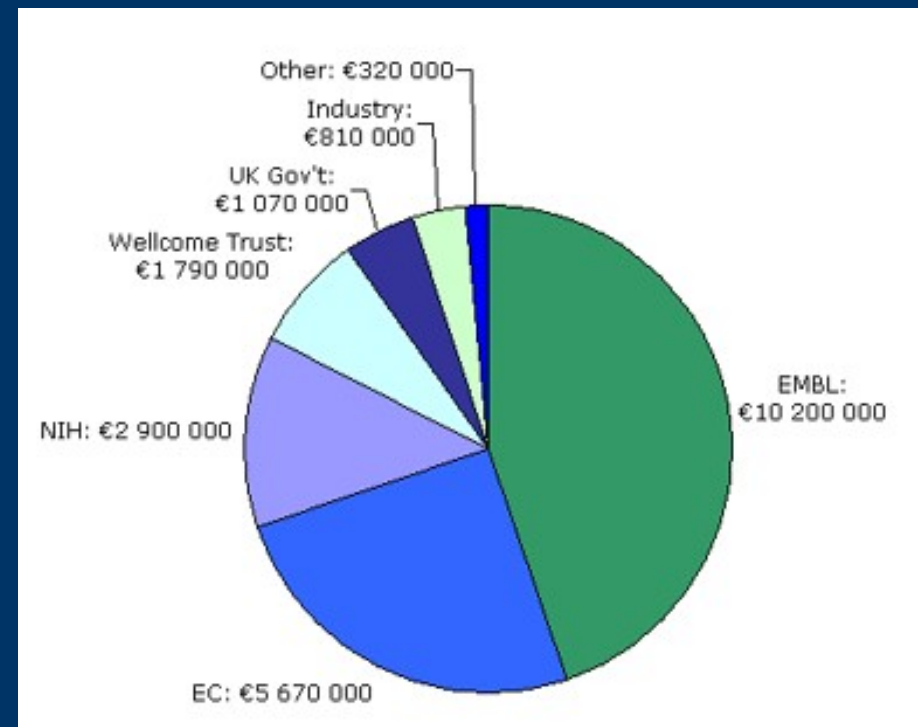
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EBI und EMBL

- Die E-Bank wird vom European Bioinformatics Institute (EBI) betrieben, einem Tochterinstitut des European Molecular Biology Laboratory (EMBL)



European Bioinformatics Institute und EMBL-Bank

- EMBL-Bank wurde 1980 im EMBL in Heidelberg gegründet
 - Rasches Wachstum von EMBL-Bank durch Genomprojekte überfordert das EMBL => (Bio)Informatiker werden Benötigt
 - 1992 Gründung des EBI in Cambridge(UK), seitdem Betreuung der EMBL-Bank durch das EBI
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Benutzung von EMBL-Bank

- EBI bietet verschiedene Tools zur Benutzung der EMBL-Bank
- Abfrage von Daten
 - SRS (Programm zur Abfrage von daten und aus verschiedenen Datenbanken)
 - Dbfetch
- Einpflegen von Daten
 - wEBIn



Nutzungsbeispiele

Datenanfragen





Reset search EMBL

Search Options

Combine search terms with: & (AND)

Use wildcards

Get results of type: Entry

Result Display Options

View results using: EMBLSeqSimpleView

or

Create a view

Show 30 results per page

Tips

Fields you can search | **Your search terms**

In a single field, you can separate multiple values by &, |, ! Search

i Keywords	▼	melanoma
i AllText	▼	
i AllText	▼	
i AllText	▼	

Suche

Create a view

Select the fields you want displayed in your view and choose the format

Choose 1 or more fields:

- Molecule
- Division
- Sequence Length
- Accession Number
- Primary Accession Number
- Sequence Version
- Entry Creation Date

Display As: Table List

Sequence Format: embl

Search

„Sicht“



Reset Query "[embl-Keywords:melanoma*]" found 81 entries next

Apply Options to:

selected results only
 unselected results only

Result Options

Launch analysis tool:
 BlastN

Show tools relevant to these results:

Link to related information:

Save results:

Display Options

View results using:
 EMBL3

EMBL	Molecule	LastUpdated	PubMedID	Authors
<input type="checkbox"/> EMBL:AB015616	mRNA	23-JUN-1998		Tanaka,T. Tanaka,T. Tanaka,M.
<input type="checkbox"/> EMBL:HSA012833	mRNA	13-NOV-1999	10399963	Aarnoudse,C.A. Aarnoudse,C.A. Van den Doel,P.B. Heemskerk,B. Schrier,P.I.
<input type="checkbox"/> EMBL:HSA012834	mRNA	13-NOV-1999	10399963	Aarnoudse,C.A. Aarnoudse,C.A. Van den Doel,P.B. Heemskerk,B. Schrier,P.I.
<input type="checkbox"/> EMBL:HSA012835	mRNA	13-NOV-1999	10399963	Aarnoudse,C.A. Aarnoudse,C.A. Van den Doel,P.B. Heemskerk,B. Schrier,P.I.
<input type="checkbox"/> EMBL:HSA242552	mRNA	15-APR-2005	11161796	Rendtorff,N.D. Rendtorff,N.D. Frodin,M. Attie-Bitach,T. Vekemans,M. Tommerup,N.
<input type="checkbox"/> EMBL:US485994	genomic DNA	15-APR-2005		Rendtorff,N.D.

Entry from: [EMBL](#)

Entry Options

Launch analysis tool:

BlastN

Launch

Link to related information:

Link

Save entry:

Save

View:

Printer Friendly

General Information

Primary Accession #	AJ012833
Accession #	AJ012833
Entry Name	EMBL:HSA012833
Molecule Type	mRNA
Sequence Length	679
Entry Division	HUM
Sequence Version	AJ012833.1
Creation Date	18-NOV-1998
Modification Date	13-NOV-1999

Description

Description	Homo sapiens mRNA for CTL-recognized antigen on melanoma (CAMEL)
Keywords	CAMEL gene; CTL-recognized antigen on melanoma (CAMEL).;
Organism	Homo sapiens (human)
Organism Classification	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo. ;

References

1. Aarnoudse,C.A.;
Submitted (11-NOV-1998) to the EMBL/GenBank/DDBJ databases. Aarnoudse C.A., Clinical Oncology, Leiden University Medical Center, P.O. Box, Leiden 2300 RC, The Netherlands.
Position 1-679
2. Aarnoudse,C.A.; Van den Doel,P.B.; Heemskerk,B.; Schrier,P.I.;
Interleukin-2-induced, melanoma-specific T cells recognize CAMEL, an unexpected translation product of LAGE-1
Int. J. Cancer 82(3):442-448 (1999)
Pubmed [10399963](#)

Database Cross-references

GDB [GDB:6261906](#).
[GDB:7501327](#)



EBI Dbfetch

Database	Search Items	Format	Style	
EMBL	<input type="text"/>	default	default	Retrieve

Upload File	Format	Style	
<input type="text"/> <input type="button" value="Durchsuchen..."/>	default	default	Retrieve

- default
- fasta
- embl
- emblxml
- insdxml
- uniprot
- swissprot

[Dbfetch Help](#)

What is dbfetch?

Dbfetch is an acronym for "database fetch". Dbfetch provides an interface to retrieve entries from various databases at the EBI in a consistent manner. It can be used from any browser as well as within a web-aware scripting tool that uses wget, lynx or similar.

How to use dbfetch?

a. **From the browser**

Follow these instructions...

Nutzungsbeispiele

Datasubmission





- Index
- Access
- Documentation
- News
- Submission
- Group Info
- Contact

EMBL Submit to the Database

Submission of sequence information to the nucleotide sequence database prior to publication has become standard practice. A unique accession number is assigned by the database which permanently identifies the sequence submitted. The database accession number should be included in the manuscript, preferably on the first page of the journal article, or as required by individual journal procedures. This procedure ensures availability and distribution of new sequence data in a timely fashion.

The preferred submission tool is webin



- ◆ [Check sequence for vector contamination \(help\)](#)
- ◆ [Webin - WWW Submission System \(help\)](#)
- ◆ [Updating EMBL Entries \(help\)](#)
- ◆ [Webin-Align \(help\)](#)

Documentation

- ◆ [Information for Submitters](#) (including alignments, genome projects and bulk submissions)
- ◆ [Nucleotide Sequence Database Policies](#)
- ◆ [The DDBJ/EMBL/GenBank Feature Table Definition](#)
- ◆ [Sequin](#) (including instructions for downloading)

Contact

We would like to encourage laboratories wishing to discuss any collaborations to contact us. For information, comments and/or suggestions, please email us at datalib@ebi.ac.uk

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Zukunft der EMBL-Bank

- Verbesserung der Annotation
- Weitere Vergrößerung des Datenbestandes
- Stärkere Automatisierung des Datenimports aus Genomprojekten

