

Práctica 1

GenBank

Laura Oliva - 702756

Irene Sánchez - 702692

Índice

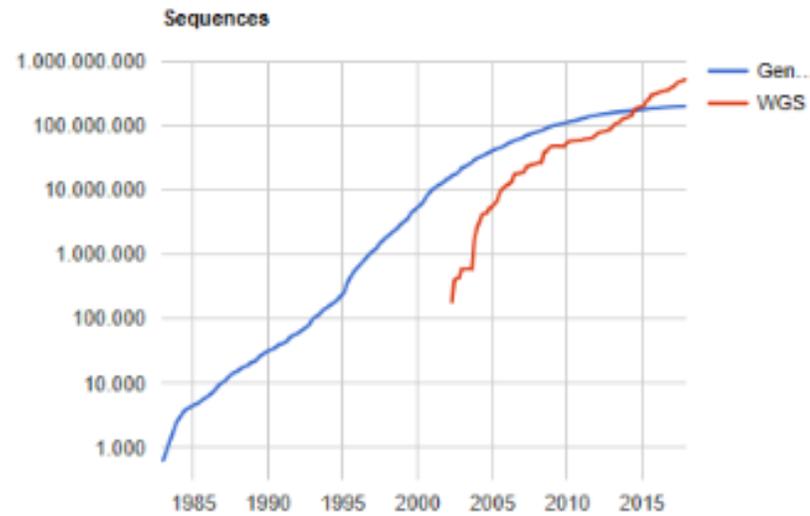
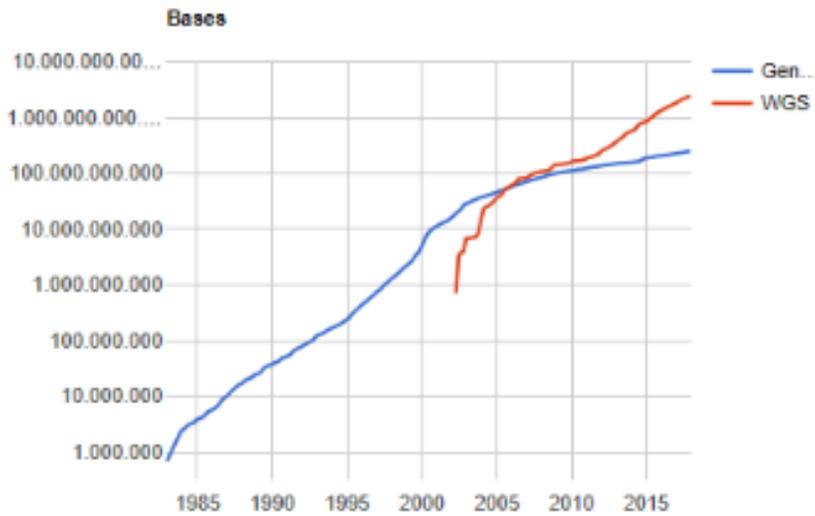
- ▶ ¿Qué es?
- ▶ Tamaño y actualizaciones
- ▶ Búsquedas simples
- ▶ Búsquedas avanzadas
- ▶ Resultados
- ▶ Filtros
- ▶ Guardar resultados

¿Qué es?

- ▶ Base de datos americana de secuencias genéticas del NIH (Instituto Internacional de Salud).
- ▶ Contiene las secuencias de ADN de acceso público. Incluye anotaciones.
- ▶ Es parte del INSDC.
- ▶ Su base de datos está dividida en 3:
 - ▶ NCBI
 - ▶ ENA
 - ▶ DDBJ
- ▶ Bases de datos actualizadas diariamente.

Tamaño y actualizaciones

- ▶ Empezó en 1982: 606 secuencias y 680.338 bases nitrogenadas.
- ▶ En 2017: 206.293.625 secuencias y 249.722.163.594 bases nitrogenadas.
- ▶ El número de bases nitrogenadas se duplica cada 18 meses.
- ▶ Cada 2 meses sale una nueva versión.



Búsquedas simples

Nucleotide Search

All

- All Databases
- Assembly
- BioCollections
- BioProject
- BioSample
- BioSystems
- Books
- ClinVar
- Clone
- Conserved Domains
- dbGaP
- dbVar
- EST**
- Gene
- Genome
- GEO DataSets
- GEO Profiles
- GSS
- GTR

HomoloGene

- Identical Protein Groups
- MedGen
- MeSH
- NCBI Web Site
- NLM Catalog
- Nucleotide
- OMIM
- PMC
- PopSet
- Probe
- Protein
- Protein Clusters
- PubChem BioAssay
- PubChem Compound
- PubChem Substance
- PubMed
- PubMed Health
- SNP
- Sparcle

SRA

- Structure
- Taxonomy
- ToolKit
- ToolKitAll
- ToolKitBookgh**
- UniGene

Búsqueda avanzada

Builder

All Fields ▾ genomic dna ⊖ [Hide index list](#)

- genomic dna (1534423)
- genomic dna 1218 1 (2)
- genomic dna 5 (3)
- genomic dna amplification (78044)
- genomic dna amplification products (29)
- genomic dna analyses (5)
- genomic dna analysis (38)
- genomic dna bac (95)
- genomic dna bac library (6)
- genomic dna bacteriophage p1 genome systems, inc (1)

[Previous 200](#)
[Next 200](#)
[Refresh index](#)

AND
OR
NOT

AND ▾ All Fields ▾ ⊖ + [Show index list](#)

Search or [Add to history](#)

Accession	Gene Name	Page Number
All Fields	Isolate	Primary Accession
Assembly	Issue	Primary Organism
Author	Journal	Properties
BioProject	Keyword	Protein Name
BioSample	Modification Date	Publication Date
Breed	Organism	SeqID String
Component Accession		Sequence Length
Cultivar		Strain
Division		Substance Name
EC/RN Number		Text Word
Feature key		Title
Filter		Volume

Resultados

NCBI Resources How To Sign in to NCBI

Nucleotide Nucleotide all[filter] Search

Create alert Advanced

Species
Animals (133,008,729)
Plants (38,937,698)
Fungi (7,194,962)
Protists (5,665,863)
Bacteria (39,129,221)
Archaea (624,770)
Viruses (2,668,826)
Customize ...

Molecule types
genomic
DNA/RNA (133,354,539)
mRNA (45,166,934)
rRNA (182,320)
Customize ...

Source databases
INSDC (GenBank) (206,613,288)
RefSeq (48,574,371)
Customize ...

Genetic compartments
Chloroplast (1,064,864)

Summary 20 per page Sort by Default order

Format
Summary
GenBank
GenBank (full)
FASTA
FASTA (text)
ASN.1
Revision History
Accession List
GI List

Send to: Filters: Manage Filters

Find related data
Database: Select

Find items

Search details
all[filter]

Search See more...

Recent activity
Turn Off Clear

all[filter] (255450202)

Items: 1 to 20 of 255450202

Found 372398013 nucleotide sequences. Nucleotide (255450202) EST (76973976) GSS (39973835)

- [Homo sapiens Sharpr-MPRA regulatory region 9595 \(LOC111982872\) on chromosome 10](#)
 - 495 bp linear DNA
Accession: NG_056365.1 GI: 1343071312
[GenBank](#) [FASTA](#) [Graphics](#)
- [Homo sapiens Sharpr-MPRA regulatory region 7934 \(LOC111982871\) on chromosome 10](#)
 - 495 bp linear DNA
Accession: NG_056364.1 GI: 1343071311
[GenBank](#) [FASTA](#) [Graphics](#)
- [Homo sapiens Sharpr-MPRA regulatory region 14427 \(LOC111982870\) on chromosome 10](#)
 - 495 bp linear DNA
Accession: NG_056363.1 GI: 1343071310
[GenBank](#) [FASTA](#) [Graphics](#)

Resultados

LOCUS AM282870 718 bp DNA linear PLN 27-JAN-2010
DEFINITION Prunus armeniaca chloroplast atpB-rbcL intergenic spacer, cultivar Alfred.
ACCESSION AM282870
VERSION AM282870.1
KEYWORDS atpB-rbcL intergenic spacer.
SOURCE chloroplast Prunus armeniaca (apricot)
ORGANISM Prunus armeniaca
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; Gunneridae; Pentapetalae; rosids; fabids; Rosales; Rosaceae; Maloideae; Amygdaleae; Prunus.

REFERENCE 1
AUTHORS Reales,A., Sargent,D.J., Tobutt,K.R. and Rivera,D.
TITLE Phylogenetics of Eurasian plums, Prunus L. section Prunus (Rosaceae), according to coding and non-coding chloroplast DNA sequences
JOURNAL Tree Genet. Genomes 6 (1), 37-45 (2009)
REFERENCE 2 (bases 1 to 718)
AUTHORS Sargent,D.J.
TITLE Direct Submission
JOURNAL Submitted (21-JUN-2006) Sargent D.J., Plant Breeding and Genetics, East Malling Research, New Road, East Malling, Kent, ME19 6BJ, UNITED KINGDOM

FEATURES Location/Qualifiers
source 1..718
/organism="Prunus armeniaca"
/organelle="plastid:chloroplast"
/mol_type="genomic DNA"
/cultivar="Alfred"
/db_xref="taxon:36596"
misc feature 1..718
/note="atpB-rbcL intergenic spacer"

ORIGIN
1 ggattttattc tcatataaaa tatgtcgaaa tttttgcca aaattactga aatcaaaaat
61 aaattcgata gcaaaacaag ttaagttgat cgattaattc aataagaaat gggcttagc
121 gctcgatttc gttggtacca tccaactgaa tccaattcaa ttgtttactt attcagtgaa
181 ttgaaaaaatt caaacaaaac ccatttccaa aatagcaagt gtatgaataa aaattttgag
241 aaagtctttt atttgccat cattatagac aataccttcc atattatcta tggaattcga
301 accccattta cgatttcttt tttctatctc attggtcctt atttacgata tcagcatatc

Filtros I

Species

Animals (133,008,729)
Plants (38,937,698)
Fungi (7,194,962)
Protists (5,665,863)
Bacteria (39,129,221)
Archaea (624,770)
Viruses (2,668,826)
Customize ...

Molecule types

genomic
DNA/RNA (133,354,539)
mRNA (45,166,934)
rRNA (182,320)
Customize ...

Enzyme types

Hydrolases
Isomerases
Ligases
Lyases
Oxidoreductases
Transferases

Source databases

INSDC (GenBank)
(206,613,288)
RefSeq (48,574,371)
Customize ...

Genetic compartments

Chloroplast (1,064,864)
Mitochondrion (4,501,317)
Plasmid (175,448)
Plastid (1,170,708)

Sequence length

Custom range...

Release date

Custom range...

Revision date

Custom range...

Search fields

Choose ...

Results by taxon

Top Organisms [\[Tree\]](#)

Homo sapiens (15542647)
Escherichia coli (1594245)
uncultured bacterium (771548)
Acinetobacter baumannii (698696)
Klebsiella pneumoniae (555581)
All other taxa (7173513)

More...

Filtros II

Find related data 

Database:

Option:

Link to r

- Component Of
- Annotated Genomic Components (Core)
- Identical RefSeq
- Order cDNA clone
- RNA
- Genomic Neighbours
- Identical GenBank Sequence
- RefSeq Genome Sequences
- Other INSDC Genome Sequences
- All segments from this genome

Recent

 allf



ar

tide

Find related data 

Database:

Option:

RNA sequence records that are annotated on the current genomic nucleotide sequences. The RNA records represent aligned or predicted transcripts of the current records.

Guardar resultados

The image shows a 'Send to' dialog box from a bioinformatics application. The dialog has several sections: 'Complete Record' with radio buttons for 'Complete Record', 'Coding Sequences', and 'Gene Features'; 'Choose Destination' with radio buttons for 'File' (selected), 'Clipboard', and 'Collections'; a status bar indicating 'Download 26336230 items.'; a 'Format' dropdown menu currently set to 'Summary'; a 'Sort by' dropdown menu currently set to 'Default order'; and a 'Create File' button. Two callout boxes are present: one for the 'Format' dropdown, listing options like 'Summary', 'GenBank', 'FASTA', 'XML', etc., with 'Summary' selected; and another for the 'Sort by' dropdown, listing options like 'Default order', 'Accession', 'Date Modified', etc., with 'Default order' selected. Arrows point from the selected items in these callouts to their respective dropdown menus in the dialog. The background shows a list of items with columns for 'Accession', 'Protein', and 'Gene', with some text partially visible like 'on', '[Tree]', '(15542647)', 'li (1594245)', 'terium (771548)', 'baumannii (6986', 'umoniae (55558:', '7173513)', 'ta', and 'otide'. At the bottom, there is a line of text: 'RNA sequence records that are ar'.

Preguntas

