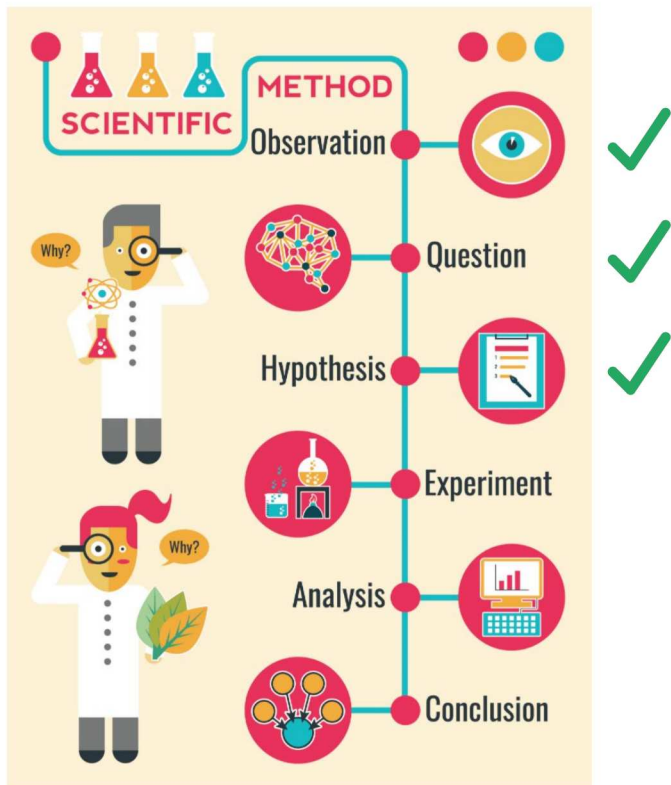


Índice

1. Introducción
2. Algoritmos
3. Selección de la información
4. Interpretación de resultados
5. Buscador de genes
6. Actividades

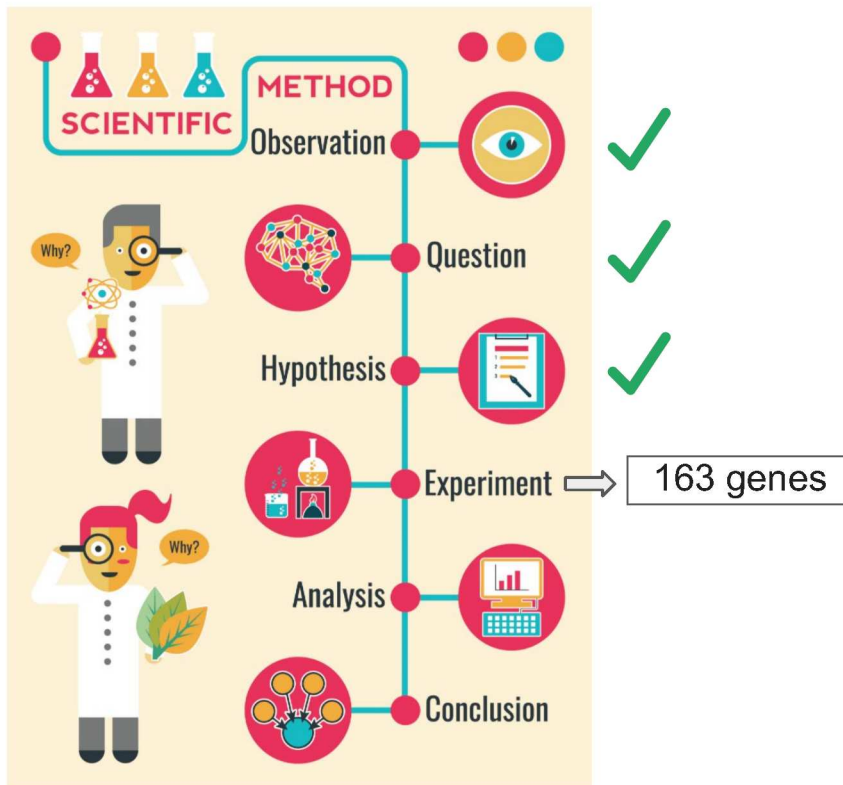
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1. Introducción

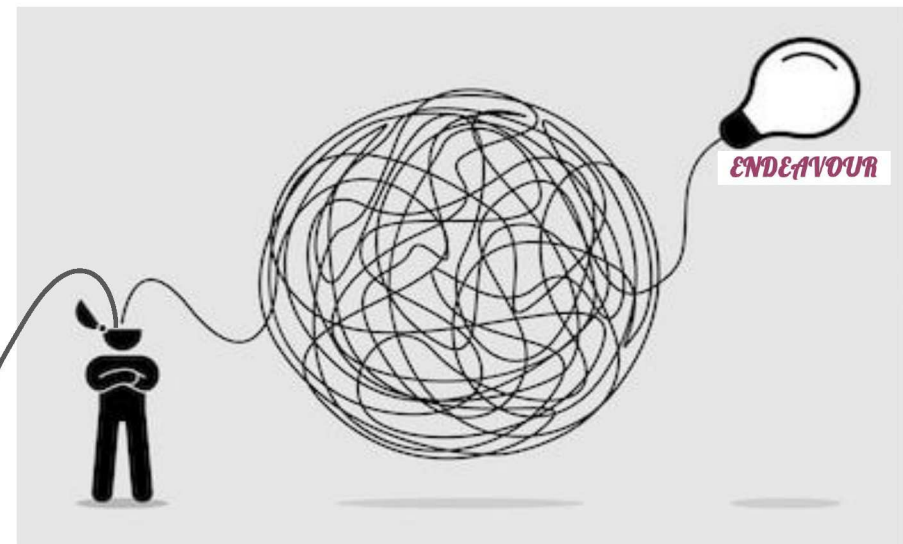
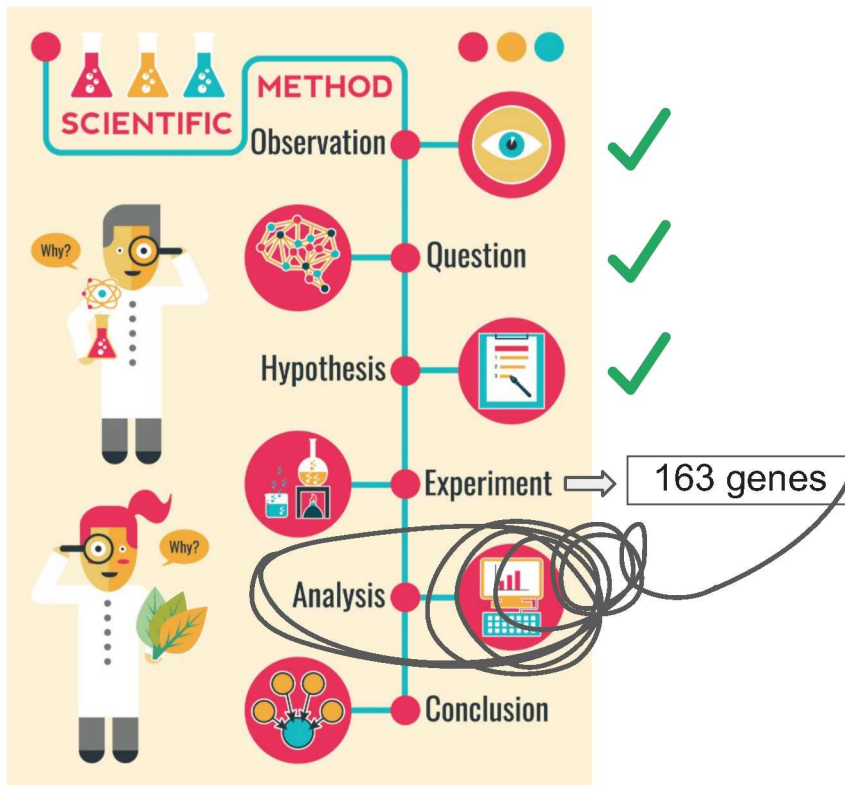


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1. Introducción



1. Introducción



PRIORIZACIÓN

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1. Introducción

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1. Introducción

Larga lista de genes
candidatos



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1. Introducción

Larga lista de genes
candidatos



Falta de dinero



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1. Introducción

Larga lista de genes
candidatos



Falta de dinero



Falta de tiempo



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1. Introducción

Larga lista de genes
candidatos



Falta de dinero



Falta de tiempo



Hay que empezar



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1. Introducción

Larga lista de genes
candidatos



Falta de dinero



Falta de tiempo



Hay que empezar



PRIORIZACIÓN

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1. Introducción

- Herramienta de priorización de genes

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1. Introducción

- Herramienta de priorización de genes

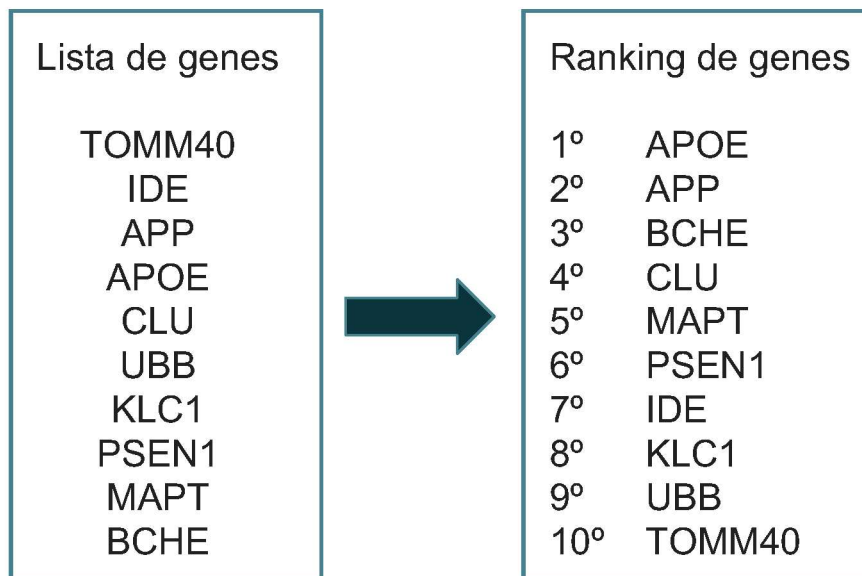
Lista de genes

TOMM40
IDE
APP
APOE
CLU
UBB
KLC1
PSEN1
MAPT
BCHE

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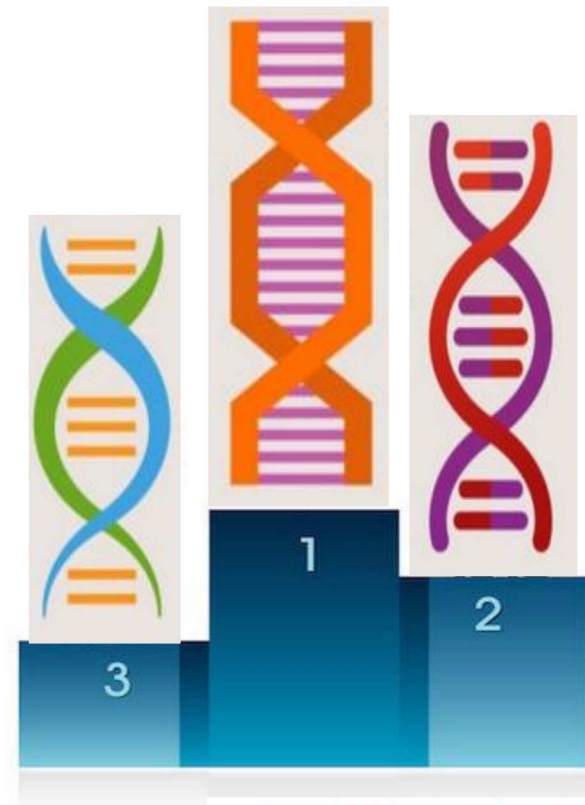
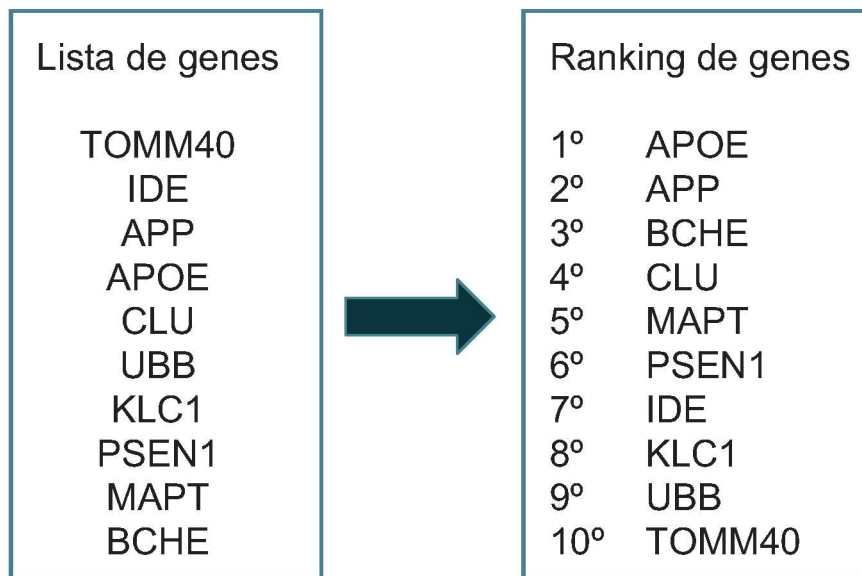
1. Introducción

- Herramienta de priorización de genes



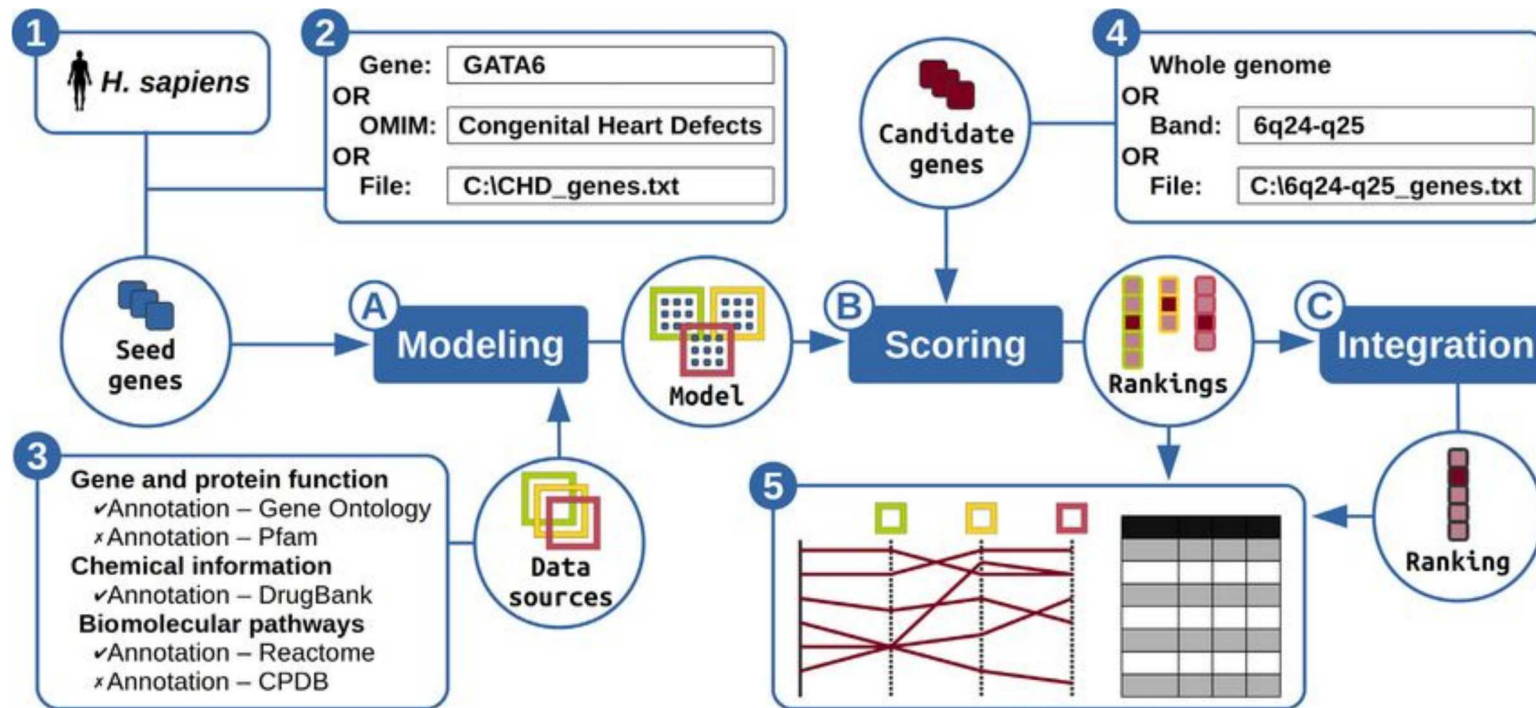
1. Introducción

- Herramienta de priorización de genes



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2. Algoritmos









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3. Selección de la información

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3. Selección de la información

1 Species

-  Homo sapiens
-  Mus musculus
-  Caenorhabditis elegans
-  Rattus norvegicus
-  Drosophila melanogaster
-  Danio rerio

3. Selección de la información

1 Species

2 Training genes



Homo sapiens



Mus musculus



Caenorhabditis elegans



Rattus norvegicus



Drosophila melanogaster



Danio rerio

KCNJ2

Dock5

Nfasc

pan2

clk1

HIST2H2BE

KCNMB4

LRP2

Hist1h2ac

MYOT

FLCN

C10orf128

TF

PEX5L

RELN

AZGP1

Nptx2

Arrdc2

abca8

Tob2

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3. Selección de la información

1 Species

- Homo sapiens
- Mus musculus
- Caenorhabditis elegans
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- Danio rerio

2 Training genes

KCNJ2
Dock5
Nfasc
pan2
clk1
HIST2H2BE
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LRP2
Hist1h2ac
MYOT
FLCN
C10orf128
TF
PEX5L
RELN
AZGP1

Nptx2
Arrdc2
abca8
Tob2

3 Data sources used to build models

Gene and protein function

- Annotation - Gene Ontology
- Annotation - Pfam

Chemical information

- Annotation - DrugBank

Bio-molecular pathways

- Annotation - Reactome
- Annotation - CPDB

Phenotypic information

- Annotation - GAD

Interaction networks

- Interaction - String
- Interaction - iRefIndex
- Interaction - GeneRIF

Expression profiles

- Expression - Su et al (2002)

Expression ontologies

- Annotation - PaGenBase

Sequence based features

- Blast
- Annotation - Aura

- Annotation - UniProt
- Annotation - SIMAP (localization)

- Annotation - Stitch

- Annotation - WikiPathways
- Annotation - hiPathDB

- Annotation - OMIM

- Interaction - BioGrid
- Interaction - Mint

- Expression - Su et al (2004)

- Annotation - CGAP

- Precalculated - Ouzounis
- Annotation - mirZ

- Text-mining

- Annotation - RGD ChEBI

- Annotation - RGD pathways

- Annotation - RGD MP

- Interaction - I2D
- Interaction - HPRD

- Expression - CMAP

- Annotation - GNF

- Precalculated - Prospectr

- Annotation - InterPro

- Annotation - BioCarta

- Annotation - RGD RDO

- Interaction - IntAct
- Interaction - MIPS







- Expression - Lukk et al

- Annotation - eGenetics

- Precalculated - HaploPred

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3. Selección de la información

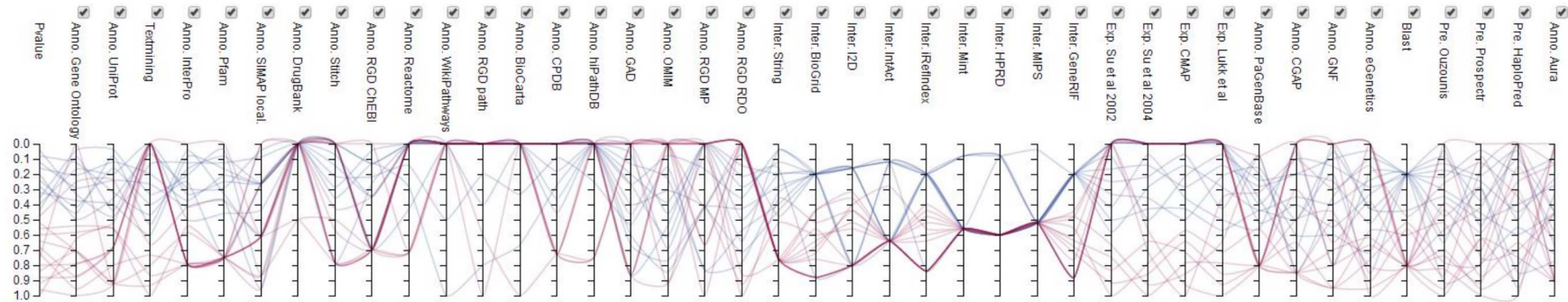
1 Species	2 Training genes	3 Data sources used to build models	4 Candidates			
 <input checked="" type="radio"/> Homo sapiens  <input type="radio"/> Mus musculus  <input type="radio"/> Caenorhabditis elegans  <input type="radio"/> Rattus norvegicus  <input type="radio"/> Drosophila melanogaster  <input type="radio"/> Danio rerio	KCNJ2 Dock5 Nfasc pan2 clk1 HIST2H2BE KCNMB4 LRP2 Hist1h2ac MYOT FLCN C10orf128 TF PEX5L RELN AZGP1 Nptx2 Arrdc2 abca8 Tob2	Gene and protein function <input type="checkbox"/> Annotation – Gene Ontology <input type="checkbox"/> Annotation – Pfam Chemical information <input type="checkbox"/> Annotation – DrugBank Bio-molecular pathways <input type="checkbox"/> Annotation – Reactome <input type="checkbox"/> Annotation – CPDB Phenotypic information <input type="checkbox"/> Annotation – GAD Interaction networks <input type="checkbox"/> Interaction – String <input type="checkbox"/> Interaction – iRefIndex <input type="checkbox"/> Interaction – GeneRIF Expression profiles <input type="checkbox"/> Expression – Su et al (2002) Expression ontologies <input type="checkbox"/> Annotation – PaGenBase Sequence based features <input type="checkbox"/> Blast <input type="checkbox"/> Annotation – Aura	<input type="checkbox"/> Annotation – UniProt <input type="checkbox"/> Annotation – SIMAP (localization) <input type="checkbox"/> Annotation – Stitch <input type="checkbox"/> Annotation – WikiPathways <input type="checkbox"/> Annotation – hiPathDB <input type="checkbox"/> Annotation – OMIM <input type="checkbox"/> Interaction – BioGrid <input type="checkbox"/> Interaction – Mint <input type="checkbox"/> Expression – Su et al (2004) <input type="checkbox"/> Annotation – CGAP <input type="checkbox"/> Precalculated – Ouzounis <input type="checkbox"/> Annotation – miZ	<input type="checkbox"/> Text-mining <input type="checkbox"/> Annotation – RGD ChEBI <input type="checkbox"/> Annotation – RGD pathways <input type="checkbox"/> Annotation – RGD MP <input type="checkbox"/> Interaction – I2D <input type="checkbox"/> Interaction – HPRD <input type="checkbox"/> Expression – CMAP <input type="checkbox"/> Annotation – GNF <input type="checkbox"/> Precalculated – Prospectr	<input type="checkbox"/> Annotation – InterPro <input type="checkbox"/> Annotation – BioCarta <input type="checkbox"/> Annotation – RGD RDO <input type="checkbox"/> Interaction – IntAct <input type="checkbox"/> Interaction – MIPS <input type="checkbox"/> Expression – Lukk et al <input type="checkbox"/> Annotation – eGenetics <input type="checkbox"/> Precalculated – HaploPred	BEND4 Celf4 ank1 PHLDB2 BTBD11 Kih13 ank1 - mtch2 znf574 AGK SLC18A2 - ddc SLC10A4 Cnpy2 Dok6 AT4G28910 macrod2 ITPR1

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4. Interpretación de resultados

■ Training gene ■ Candidate gene ■ Training and candidate gene

Restore Keep Export



Gene name	Group	P-value	Annotati...	Annotati...	Text-min...	Annotati...	Annotati...	Annotati...	Annotati...	Annotati...	Annotati...	Annotati...	Annotati...	Annotati...
CYP7B1	Training gene	0.24	0.4167	0.16	0.4	0.25	0.75	0.2609	0	0.2143	0.2174	0.1429	0.5	0.2
HSPD1	Training gene	0.28	0.4583	0.08	0.5333	0.0417	0.3333	0.6087	0	0.3571	0.1304	0.2857	1	0.8
PNPLA6	Training gene	0.32	0.375	0.4	0.6	0.0833	0.1667	0.2609	0	0.0714	0.3478	0	0	0.4
KIAA0196	Training gene	0.36	0.0417	0.04	0.3333	0.2083	0.0417	0.8696	0	0	0.6957	0	0	0
ZFYVE27	Training gene	0.4	0.1667	0.2	0	0.5	0.4583	0.4348	0	0	0.6957	0	0	0
NIPA1	Training gene	0.44	0.0833	0.44	0	0.3333	0.25	0.2609	0	0	0.1304	0	0	0
KIF1A	Candidate gene	0.48	0.25	0.24	0.6667	0.4167	0.375	0.6087	0.5	0.7857	0.6957	0	0	0
SNED1	Candidate gene	0.52	0.7083	0.92	0	0.7917	0.75	0.6087	0	0.7857				
PASK	Candidate gene	0.56	0.5417	0.56	0.8667	0.7917	0.75	0	0	0.4286				

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Showing all 25 rows

5. Buscador de genes

Beegle

e.g. Alzheimer's disease

SEARCH KNOWN GENES



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Sandra Alandes Esteve

salandes@cipf.es

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