

Start Tutorial

Genome Version

hg19

Phenotype

- ☐ AD Biomarkers
- ☐ AD Neuropathology
- ☒ Aging
- ☒ Dementia Clinical Diagnosis
- ☐ Mild Cognitive Impairment (MCI)
- ☐ Sex

Genomic Position

Input Method

- ☒ Input a gene name
- ☐ Input a genomic region

Select a Gene

EIF2D

Example Input

Genome Tracks

ENSEMBL Transcripts

UCSC Genes

ENSEMBL Genes

ENSEMBL Transcripts

Roadmap (Primary monocytes from peripheral blood)

Roadmap (Primary neutrophils from peripheral blood)

Roadmap (Primary B cells from peripheral blood)

Roadmap (Primary T cells from peripheral blood)

Roadmap (Primary Natural Killer cells from peripheral blood)

ChromHMM GM12878 (B-Lymphocytefrom peripheral blood)

CpG Island

1 User specifies **gene** or **region**

2 User selects **annotation tracks**

3 **Display Data** tab returns both DMRs and CpGs meeting search criteria

4 **Multi-omics Resources** section includes links to GWAS catalog, NIAGADS GenomicsDB, and Agora gene expression database

5 **Display Plot** tab returns visualizations and annotations

Show Color Legend

Roadmap Legend

Active TSS	
Flanking Active TSS	
Transcr. at gene 5' and 3'	
Strong transcription	
Weak transcription	
Genic enhancers	
Enhancers	
ZNF genes & repeats	
Heterochromatin	
Bivalent/Poised TSS	
Flanking Bivalent TSS/Enh	
Bivalent Enhancer	
Repressed PolyComb	
Weak Repressed PolyComb	
Quiescent/Low	

Gene Query

Datasets

Display Data

Display Plot

Download Tables

DMRs

Show 10 entries

Search:

DMR	dataset	sample_group	phenotype	direction	nProbes	pValue
chr1:206786170-206786181	SIC	ADNI + AIBL	AD	+	3	1.67e-10
chr1:206785995-206786180	SIM	ADNI + AIBL	AD	+	5	2.50e-07

Showing 1 to 2 of 2 entries

Previous1Next

Multi-omics Resources

Show 10 entries

Search:

Genomic_Region	Gene	GWAS	AD Genomics	Gene Expression
chr1:206742620-206787904	EIF2D	GWAS	GenomicsDB	Agora

Showing 1 to 1 of 1 entries

Previous1Next

CpGs in Gene or Genomic Region

Explore Top 10 CpGs

Show 10 entries

Search:

CpG	chr	pos	Illumina	dataset	sample_group	phenotype	sex_specific	statistics	direction	statistics_value	pValue
cg16966520	chr1	206786174	LGTN	SIM	ADNI + AIBL	AD	Yes, males	OR for AD (meta-analysis)	+	1.057	8.88e-04

Gene Query

Datasets

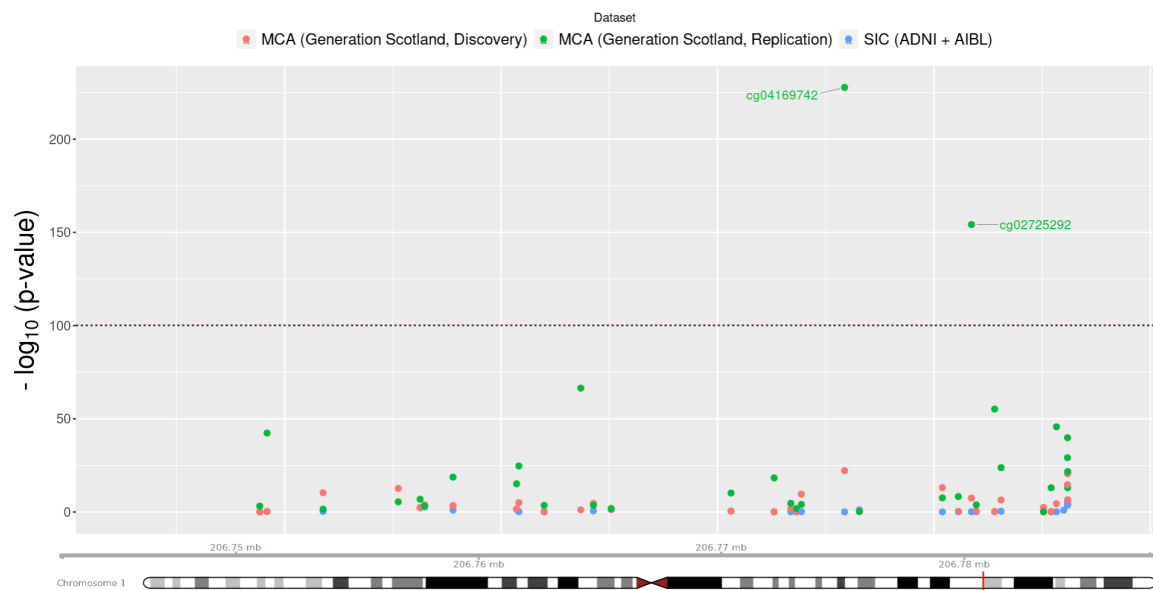
Display Data

Display Plot

CpG Statistics Plots

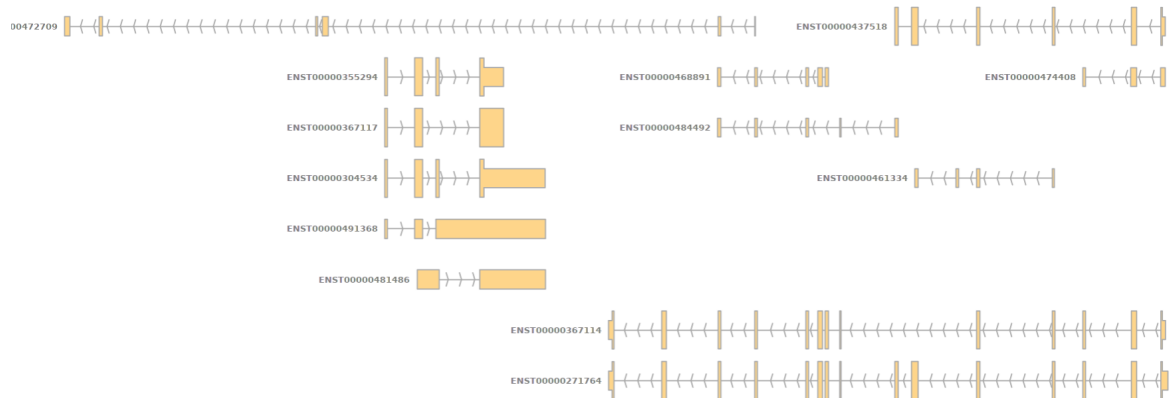
Label Threshold (-log10)

100



Genome Track Plots

ENSEMBL Transcripts



Roadmap (Primary B cells from peripheral blood)



CpG Island

Figure 2 Workflow of Gene Query tool.