Data Portal

DATA PORTAL

This is the online help for the Allen Institute for Brain Science Data Portal.

Overview

The Allen Brain Atlas resources are a growing collection of online public resources integrating extensive gene expression and neuroanatomical data, complete with a novel suite of search and viewing tools. This portal gives you access to each of these resources by clicking on the button for a particular project or by clicking the project from the banner tab or drop-down menu.

Key features of the Data Portal:

Announcements

- Latest updates
- Upcoming Events and Training
- How to connect with us

Tutorials

A growing library of short video tutorials that demonstrate different aspects of using the Allen Brain Atlas resources.

Site Search

A way to search across the entire suite of datasets.

Search

All data associated with the Allen Brain Atlas resources have been indexed and can be searched. The data span many different modalities including colorimetric in situ hybridization (ISH), dual fluorescence ISH, histological staining, microarray, RNA-Seq and exon array data.

The list of indexed subjects includes:

- Genes
- Image Series/Experiments
- Anatomic Regions/Structures
- Reference Atlases
- Content
- Documentation Keywords

Images are grouped into "Image Series" that comprise an experiment. Experiments consist of slides from the same specimen and that receive the same treatment, whether it is Nissl staining or ISH with a probe for a particular gene.

Some data sets include anatomic reference atlases to provide a structural framework for the location of gene expression.

Boolean Syntax

Use of boolean syntax (i.e. AND, OR, NOT) is supported when using the search feature. Supported boolean operators include:

Operator	Example Query
AND	mouse AND Grik3
OR	Abcc1 OR Ache OR Adcyap1
NOT	reference atlas NOT spinal

The AND operator (&) is implicit, so spaces between words that are not separated by an operator will be treated like an &.
OR (|) has higher operator precedence than AND (&).
Parentheses can be used to group criteria, but nested parentheses are not supported at this time.
The NOT operator is not supported within parentheses.
Enclose search phrases in quotation marks to avoid confusion with boolean operators.

Search Results

Clicking on "Search" returns a list of results that include data from all of the datasets associated with the Allen Brain Atlas resources that match your search. The search results' order is weighted by subject and type of dataset.

Data Highlights

On the portal page, an image from one of the datasets will be displayed to highlight interesting data from the Allen Brain Atlas resources. Clicking on "More Highlights" will take you to a page with highlights from each of our projects. You can browse through the images from each project and click on any of the images to be taken to the experiment from which the highlight was taken.