

Allen Human Brain Atlas

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This is the online help for the ALLEN **Human Brain Atlas** web application.

The Dataset

The Allen Human Brain Atlas is a unique multi-modal atlas of the human brain, integrating anatomic and genomic information and coupled with a suite of visualization and data mining tools.

Key features:

- **Microarray** data providing an "all genes, all structures" survey in multiple adult control brains
 - Genome-wide coverage - over 62,000 gene probes per expression profile
 - Comprehensive anatomic coverage - approximately 500 samples per hemisphere across cerebral, cerebellar and brainstem structures
 - Mapped with histology into unified 3-D anatomic framework based on MRI
 - Anatomic and gene-based search with options for comparing among structures or donors
 - Heat map and other viewing options, as well as files available for download
- ***In situ* hybridization** image data comprising multiple data sets from targeted studies covering selected genes in specific brain regions
 - Subcortex study examining 55 genes across subcortical regions and 10 additional genes in hypothalamus in one male and one female donor
 - Cortex Study surveying 1,000 genes in visual and temporal cortex in multiple adult control brains
 - Schizophrenia Study of 60 genes in dorsolateral prefrontal cortex of over 50 control and schizophrenia cases
 - Autism Study of 25 genes in frontal, temporal and occipital cortical regions of 11 control and 11 autism cases
 - Neurotransmitter Study characterizing expression of selected neurotransmitter system genes in major cortical and subcortical areas of adult human brain
- **MRI** data for brains used for all microarray and some ISH analyses
 - Multi-planar viewer for structural MRI
 - T1, T2 and DTI files for download
- **Brain Explorer® 3-D viewer** for interactive viewing of brain anatomy and gene expression distribution, including inflated cortical surface views

For complete details please see the Whole Brain Microarray and *In situ* hybridization white papers on our [Documentation](#) page.