Resource Summary Report

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EyeBrowse

RRID:SCR_008000
Type: Tool

Proper Citation

EyeBrowse (RRID:SCR_008000)

Resource Information

URL: http://eyebrowse.cit.nih.gov/

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Description: EyeBrowse displays expressed sequence tag (EST) cDNA clones from eye tissues (derived from NEIBank and other sources) aligned with current versions of the human, rhesus, mouse, rat, dog, cow, chicken, or zebrafish genomes, including reference sequences for known genes. This gives a simplified view of gene expression activity from different parts of the eye across the genome. The data can be interrogated in several ways. Specific gene names can be entered into the search window. Alternatively, regions of the genome can be displayed. For example, entering two STS markers separated by a semicolon (e.g. RH18061;RH80175) allows the display of the entire chromosomal region associated with the mapping of a specific disease locus. ESTs for each tissue can then be displayed to help in the selection of candidate genes. In addition, sequences can be entered into a BLAT search and rapidly aligned on the genome, again showing eye derived ESTs for the same region. EyeBrowse includes a custom track display SAGE data for human eye tissues derived from the EyeSAGE project. The track shows the normalized sum of SAGE tag counts from all published eye-related SAGE datasets centered on the position of each identifiable Unigene cluster. This indicates relative activity of each gene locus in eye. Clicking on the vertical count bar for a particular location will bring up a display listing gene details and linking to specific SAGE counts for each eye SAGE library and comparisons with normalized sums for neural and non-neural tissues. To view or alter settings for the EyeSAGE track on EyeBrowse, click on the vertical gray bar at the left of the display. Other custom tracks display known eye disease genes and mapped intervals for candidate loci for retinal disease, cataract, myopia and cornea disease. These link back to further information at NEIBank. For mouse, there is custom track data for ChIP-on-Chip of RNA-Polymerase-II during photoreceptor maturation.

Synonyms: EyeBrowse

Resource Type: data set, data or information resource

Keywords: est, expressed sequence tag, eye, gene, genome, cataract, cdna, chicken, clone, cluster, cornea, cornea disease, cow, data, disease, dog, human, locus, maturation, mouse, myopia, photoreceptor, rat, retina, rhesus, rna polymerase-ii, tag, zebrafish, data analysis software, eye tracking device

Related Condition: Retinal disease, Cataract, Myopia, Cornea disease

Funding: NEIBank

Resource Name: EyeBrowse

Resource ID: SCR_008000

Alternate IDs: nif-0000-07733

Record Creation Time: 20220129T080244+0000

Record Last Update: 20250411T055157+0000

Ratings and Alerts

No rating or validation information has been found for EyeBrowse.

No alerts have been found for EyeBrowse.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Chen P, et al. (2016) Mutations in the TMCO3 Gene are Associated with Cornea Guttata and Anterior Polar Cataract. Scientific reports, 6, 31021.

Wistow G, et al. (2012) The human crystallin gene families. Human genomics, 6(1), 26.

Wyatt K, et al. (2006) Lengsin is a survivor of an ancient family of class I glutamine synthetases re-engineered by evolution for a role in the vertebrate lens. Structure (London, England : 1993), 14(12), 1823.