Package ‘gpaExample’

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Type Package

Title Example data for the GPA package (Genetic analysis incorporating Pleiotropy and Annotation)

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Author Dongjun Chung, Carter Allen

Maintainer Dongjun Chung <dongjunchung@gmail.com>

Description Example data for the GPA package, consisting of the p-values of 1,219,805 SNPs for five psychiatric disorder GWAS from the psychiatric GWAS consortium (PGC), with the annotation data using genes preferentially expressed in the central nervous system (CNS).

License GPL (>= 2)

URL http://dongjunchung.github.io/GPA/

LazyData FALSE

biocViews ExperimentData, Homo_sapiens_Data, SNPData

NeedsCompilation no

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R topics documented:

gpaExample

exampleData

Index
exampleData  

**PGC GWAS Dataset and Annotation Dataset**

**Description**

This is the PGC GWAS dataset and annotation dataset used in Chung et al. (2013).

**Usage**

```r
data(exampleData)
```

**Format**

A list with two matrices as elements. Two matrices of sizes 1,219,805 x 5 and 1,219,805 x 1, exampleData$pval and exampleData$ann, contain the p-values of 1,219,805 SNPs for five psychiatric disorder GWAS (ADHD, ASD, BPD, MDD, SCZ) from the psychiatric GWAS consortium (PGC) and the binary annotation data using genes preferentially expressed in the central nervous system (CNS), respectively.

**Details**

Five columns of the matrix exampleData$pval correspond to attention deficit-hyperactivity disorder (ADHD), autism spectrum disorder (ASD), bipolar disorder (BPD), major depressive disorder (MDD), and schizophrenia (SCZ). Detailed information about these data sets is provided in Cross-Disorder Group of the Psychiatric Genomics Consortium (2013a, 2013b). Summary statistics of these five psychiatric disorders were downloaded from the section for cross-disorder analysis at the Psychiatric Genomics Consortium (PGC) website (https://pgc.unc.edu/Sharing.php). exampleData$ann provides annotation data using genes preferentially expressed in the central nervous system (CNS) (Lee et al., 2012; Raychaudhuri et al., 2010), where the entries corresponding to SNPs within 50-kb of the genes from the CNS set were set to be one and zero otherwise. See the vignette of R package GPA and Chung et al. (2013) for more details.

**Source**


References

Examples
data(exampleData)
head(exampleData)
Index

* datasets
  exampleData, 2

exampleData, 2