

TissGDB: tissue-specific gene database in cancer

Xiaoni Bioinformatics paper01 09032020

- The **TissGDB Website** is [here](#).
- **Publication Link** *Nucleic Acids Res.* 2018 Jan 4;46(D1):D1031-D1038. doi: 10.1093/nar/gkx850

Representative Tissue-Specific Gene Expression Resources

- The Human Protein Atlas (**HPA**)
- Tissue-specific Gene Expression and Regulation (**TiGER**)
- Genotype-Tissue Expression (**GTEx**)

Feature

- **2461** Tissue Specific Genes (TissGenes)
- Across **22** Tissue Types
- Match the **28** Cancer types of The Cancer Genome Atlas (TCGA)

Analyses

- **Identified** hundreds of TissGenes
- universally **kept** or **lost** tissue-specific gene expression
- cancer type-specific **isoform** expression
- **fusion** with oncogenes or tumor suppressor genes
- **markers** for protective or risk prognosis

Seven Categories of Annotations

1. TissGeneSummary
2. TissGeneExp
3. TissGene-miRNA
4. TissGeneMut 4.1 TissGeneSNV 4.2 TissGeneCNV 4.3 TissGeneFusions
5. TissGeneNet
 - CePIN
 - Cytoscape
 - R
6. TissGeneProg 6.1 overall survival, OS 6.2 relapse free survival, RFS
7. TissGeneClin 7.1 TissGeneDrug 7.2 TissGeneDisease

