

GUDMAP

Genitourinary Development Molecular Anatomy Project

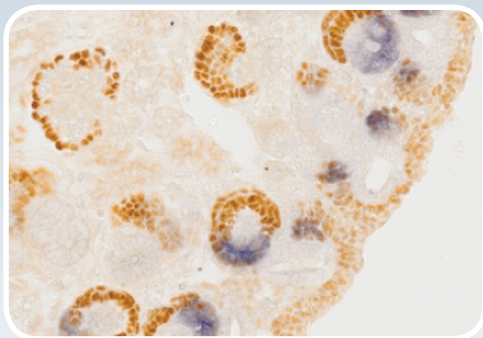
The GUDMAP consortium provides **freely available** gene expression data and tools to facilitate scientific and medical research.

The GUDMAP database is a publicly accessible database of gene expression in the developing mouse genitourinary system.

GUDMAP Data

Microarray expression assays and analyses.

In situ hybridisation (ISH) screens (section & wholemount), immunohistochemistry and transgenic reporters.



GUDMAP has ~ 8,000 ISH entries covering almost 3,000 genes and over 250 microarray expression studies, with the number of entries increasing regularly.

All data submitted to GUDMAP are curated to a high standard.

Annotation of GUDMAP data uses a high-resolution anatomy ontology describing the relationships between sub-compartments of the developing murine urogenital tract.

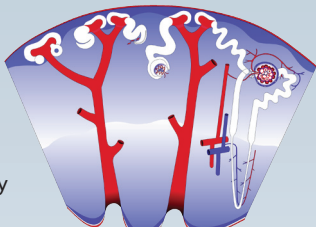
www.gudmap.org

What can GUDMAP do?

- Query gene expression by gene, anatomy or function.
- Complex anatomical searches across multiple components, multiple developmental stages and varying expression locations and patterns.
- Provide gene expression summaries that give overviews of expression.
- Link OMIM diseases and phenotypes with gene expression data.
- Identification and analysis of genes responsible for functions and disease of the GU system, through the GATACA tool (<http://gudmap.cchmc.org>).
- Build, analyse and store collections of in situ and microarray data.
- Describe molecular markers for different structures in organ summary pages (work ongoing).

Tutorials

Detailed tutorials describe the development of the murine urinary and reproductive systems. These are supplemented with high-quality schematic diagrams.



Examples of questions that can be answered using GUDMAP

- How does the GU tract develop?
- Where is my gene of interest expressed in the GU system?
- Which genes are expressed in structure A and have no detected expression in any other structures?
- What genes, within a genetic interval, are likely to have disease-causing mutations?

Contacting GUDMAP

We welcome enquiries about any aspect of the project. Please contact us at:

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