

Resource Summary Report

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Patterns of Gene Expression in Drosophila Embryogenesis

RRID:SCR_002868

Type: Tool

Proper Citation

Patterns of Gene Expression in Drosophila Embryogenesis (RRID:SCR_002868)

Resource Information

URL: <http://insitu.fruitfly.org/cgi-bin/ex/insitu.pl>

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Description: Database of embryonic expression patterns using a high throughput RNA in situ hybridization of the protein-coding genes identified in the Drosophila melanogaster genome with images and controlled vocabulary annotations. At the end of production pipeline gene expression patterns are documented by taking a large number of digital images of individual embryos. The quality and identity of the captured image data are verified by independently derived microarray time-course analysis of gene expression using Affymetrix GeneChip technology. Gene expression patterns are annotated with controlled vocabulary for developmental anatomy of Drosophila embryogenesis. Image, microarray and annotation data are stored in a modified version of Gene Ontology database and the entire dataset is available on the web in browsable and searchable form or MySQL dump can be downloaded. So far, they have examined expression of 7507 genes and documented them with 111184 digital photographs.

Abbreviations: BDGP insitu

Synonyms: BDGP Embryonic Expression Patterns

Resource Type: data or information resource, database, source code, software resource, image collection

Defining Citation: [PMID:17645804](#), [PMID:12537577](#)

Keywords: embryo, embryogenesis, gene, anatomy, microarray, pattern, protocol, rna, gene expression, expression pattern, embryonic drosophila, in situ hybridization, annotation, est, FASEB list

Funding: Howard Hughes Medical Institute ;
NIH ;
NIGMS R01 GM076655;
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NHGRI P41 HG00739

Availability: Free, Freely available, Available for download

Resource Name: Patterns of Gene Expression in Drosophila Embryogenesis

Resource ID: SCR_002868

Alternate IDs: nif-0000-25550, r3d100011327

Alternate URLs: <https://doi.org/10.17616/R32H0K>

Old URLs: <http://www.fruitfly.org/cgi-bin/ex/insitu.pl>

Record Creation Time: 20220129T080215+0000

Record Last Update: 20260729T044033+0000

Ratings and Alerts

No rating or validation information has been found for Patterns of Gene Expression in Drosophila Embryogenesis.

No alerts have been found for Patterns of Gene Expression in Drosophila Embryogenesis.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 64 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Fisher KH, et al. (2025) Imp and Chinmo are required for embryonic motor neuron axon and dendrite targeting. Biology open, 14(7).

Bail NJ, et al. (2025) Emergence and Return Times in a Colonial, Cave-Dwelling Bat: Age and Sex Differences Driven by Reproductive Cycle. Ecology and evolution, 15(5), e71281.

De Santis R, et al. (2024) The emergence of human gastrulation upon in?vitro attachment. Stem cell reports, 19(1), 41.

Gomez JM, et al. (2024) Differential regulation of the proteome and phosphoproteome along the dorso-ventral axis of the early Drosophila embryo. eLife, 13.

- Kudron M, et al. (2024) Binding profiles for 954 *Drosophila* and *C. elegans* transcription factors reveal tissue specific regulatory relationships. *bioRxiv : the preprint server for biology*.
- de Almeida BP, et al. (2024) Targeted design of synthetic enhancers for selected tissues in the *Drosophila* embryo. *Nature*, 626(7997), 207.
- Sloutskin A, et al. (2024) From promoter motif to cardiac function: a single DPE motif affects transcription regulation and organ function in vivo. *Development (Cambridge, England)*, 151(14).
- Peng D, et al. (2024) Organogenetic transcriptomes of the *Drosophila* embryo at single cell resolution. *Development (Cambridge, England)*, 151(2).
- Cao Y, et al. (2023) Vacuolar Sugar Transporter TMT2 Plays Crucial Roles in Germination and Seedling Development in *Arabidopsis*. *International journal of molecular sciences*, 24(21).
- Sloutskin A, et al. (2023) A single DPE core promoter motif contributes to in vivo transcriptional regulation and affects cardiac function. *bioRxiv : the preprint server for biology*.
- Giacomelli L, et al. (2023) Simultaneous editing of two DMR6 genes in grapevine results in reduced susceptibility to downy mildew. *Frontiers in plant science*, 14, 1242240.
- Ashour DJ, et al. (2023) Zasp52 strengthens whole embryo tissue integrity through supracellular actomyosin networks. *Development (Cambridge, England)*, 150(7).
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- Chen X, et al. (2022) Vasa identifies germ cells in embryos and gonads of *Oryzias celebensis*. *Gene*, 823, 146369.
- Seroka A, et al. (2022) Transcriptional profiling from whole embryos to single neuroblast lineages in *Drosophila*. *Developmental biology*, 489, 21.
- Qiu B, et al. (2022) Canalized gene expression during development mediates caste differentiation in ants. *Nature ecology & evolution*, 6(11), 1753.
- Huang C, et al. (2022) Zinc oxide nanoparticle causes toxicity to the development of mouse oocyte and early embryo. *Toxicology letters*, 358, 48.
- Panfilio KA, et al. (2022) The extended analogy of extraembryonic development in insects and amniotes. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 377(1865), 20210268.
- Heinen T, et al. (2022) scDALI: modeling allelic heterogeneity in single cells reveals context-specific genetic regulation. *Genome biology*, 23(1), 8.
- Clerc T, et al. (2022) Cultivation and Imaging of *S. latissima* Embryo Monolayered Cell Sheets Inside Microfluidic Devices. *Bioengineering (Basel, Switzerland)*, 9(11).