Resource Summary Report

Generated by RRID on Aug 4, 2026

Ascidian Network for InSitu Expression and Embryological Data

RRID:SCR_013030
Type: Tool

Proper Citation

Ascidian Network for InSitu Expression and Embryological Data (RRID:SCR_013030)

Resource Information

URL: http://www.aniseed.cnrs.fr/

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Description: Database of ascidian embryonic development at the level of the genome (cis-regulatory sequences, gene expression, protein annotation), of the cell (morphology, fate, induction, lineage) or of the whole embryo (anatomy, morphogenesis). Currently, four organism models are described in Aniseed: Ciona intestinalis, Ciona savignyi, Halocynthia roretzi and Phallusia mammillata.
This version supports four sets of Ciona intestinalis transcript models: JGI v1.0, KyotoGrail 2005, KH and ENSEMBL, all functionally annotated, and grouped into Aniseedv3.0 gene models. Users can explore their expression profiles during normal or manipulated development, access validated cis-regulatory regions, get the molecular tools used to assay gene function, or all articles related to the function, or regulation of a given gene. Known transcriptional regulators and targets are listed for each gene, as are the gene regulatory networks acting in individual anatomical territories.
ANISEED is a community tool, and the direct involvement of external contributors is important to optimize the quality of the submitted data. Virtual embryo: The 3D Virtual embryo is available to download in the download section of the website.

Abbreviations: ANISEED

Synonyms: Aniseed database

Resource Type: data repository, data or information resource, database, storage service resource, service resource, software resource

Defining Citation: PMID:20647237

Keywords: embryology, embryo, gene, genome, anatomy, cis-regulatory, development, morphogenesis, morphology, protein, molecular neuroanatomy resource, cis-regulatory sequence, gene expression, protein annotation, cell, expression profile, function, regulation, blast, visualization, data analysis service, clone, FASEB list

Funding: CNRS ;
French Ministry of Research ;
Marseille-Nice Genopole ;
ARC ;
European Network QLK3-CT-2001-01890

Resource Name: Ascidian Network for InSitu Expression and Embryological Data

Resource ID: SCR_013030

Alternate IDs: nif-0000-10155

Old URLs: http://crfb.univ-mrs.fr/aniseed/index.php

Record Creation Time: 20220129T080313+0000

Record Last Update: 20260804T043507+0000

Ratings and Alerts

No rating or validation information has been found for Ascidian Network for InSitu Expression and Embryological Data.

No alerts have been found for Ascidian Network for InSitu Expression and Embryological Data.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 60 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Eliso MC, et al. (2025) Nanoplastic-Induced Developmental Toxicity in Ascidians: Comparative Analysis of Chorionated and Dechorionated Phallusia mammillata Embryos. Journal of xenobiotics, 15(1).

Negrón-Piñeiro LJ, et al. (2024) Cis-regulatory interfaces reveal the molecular mechanisms underlying the notochord gene regulatory network of Ciona. Nature communications, 15(1), 3025.

Stokes S, et al. (2024) Gene expression and cellular changes in injured myocardium of Ciona intestinalis. Frontiers in cell and developmental biology, 12, 1304755.

Welzel G, et al. (2022) Connexins evolved after early chordates lost innexin diversity. eLife, 11.

Nishida H, et al. (2022) Germline development during embryogenesis of the larvacean, Oikopleura dioica. Developmental biology, 481, 188.

Marotta P, et al. (2021) The Ascidia Ciona robusta Provides Novel Insights on the Evolution of the AP-1 Transcriptional Complex. Frontiers in cell and developmental biology, 9, 709696.

Krasovec G, et al. (2021) Comparative transcriptomic analysis reveals gene regulation mediated by caspase activity in a chordate organism. BMC molecular and cell biology, 22(1), 51.

Matsuo K, et al. (2021) Bilaterally Asymmetric Helical Myofibrils in Ascidian Tadpole Larvae. Frontiers in cell and developmental biology, 9, 800455.

A P, et al. (2021) Characterisation and functional role of a novel C1qDC protein from a colonial ascidian. Developmental and comparative immunology, 122, 104077.

Zhang J, et al. (2021) Genome-Wide Identification, Comparison, and Expression Analysis of Transcription Factors in Ascidian Styela clava. International journal of molecular sciences, 22(9).

Hudson C, et al. (2021) Neuromesodermal Lineage Contribution to CNS Development in Invertebrate and Vertebrate Chordates. Genes, 12(4).

Miglioli A, et al. (2021) Nuclear Receptors and Development of Marine Invertebrates. Genes, 12(1).

Kawai T, et al. (2021) Heterologous functional expression of ascidian Nav1 channels and close relationship with the evolutionary ancestor of vertebrate Nav channels. The Journal of biological chemistry, 296, 100783.

Onuma TA, et al. (2021) Nkx2-1 and FoxE regionalize glandular (mucus-producing) and thyroid-equivalent traits in the endostyle of the chordate Oikopleura dioica. Developmental biology, 477, 219.

Kowarsky M, et al. (2021) Sexual and asexual development: two distinct programs producing the same tunicate. Cell reports, 34(4), 108681.

Calatayud S, et al. (2021) Modular Evolution and Population Variability of Oikopleura dioica Metallothioneins. Frontiers in cell and developmental biology, 9, 702688.

Laura D, et al. (2021) Stress granules in Ciona robusta: First evidences of TIA-1-related nucleolysin and tristetraprolin gene expression under metal exposure. Comparative biochemistry and physiology. Toxicology & pharmacology : CBP, 243, 108977.

Funakoshi HM, et al. (2021) Developmental Table and Three-Dimensional Embryological Image Resource of the Ascidian Ascidiella aspersa. Frontiers in cell and developmental

biology, 9, 789046.

Coulcher JF, et al. (2020) Conservation of peripheral nervous system formation mechanisms in divergent ascidian embryos. eLife, 9.

Sawada H, et al. (2020) Three multi-allelic gene pairs are responsible for self-sterility in the ascidian Ciona intestinalis. Scientific reports, 10(1), 2514.