

Resource Summary Report

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SilkDB

RRID:SCR_007926

Type: Tool

Proper Citation

SilkDB (RRID:SCR_007926)

Resource Information

URL: <http://silkworm.genomics.org.cn/>

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Description: THIS RESOURCE IS NO LONGER IN SERVICE, documented May 10, 2017. A pilot effort that has developed a centralized, web-based biospecimen locator that presents biospecimens collected and stored at participating Arizona hospitals and biospecimen banks, which are available for acquisition and use by researchers. Researchers may use this site to browse, search and request biospecimens to use in qualified studies. The development of the ABL was guided by the Arizona Biospecimen Consortium (ABC), a consortium of hospitals and medical centers in the Phoenix area, and is now being piloted by this Consortium under the direction of ABRC. You may browse by type (cells, fluid, molecular, tissue) or disease. Common data elements decided by the ABC Standards Committee, based on data elements on the National Cancer Institute's (NCI's) Common Biorepository Model (CBM), are displayed. These describe the minimum set of data elements that the NCI determined were most important for a researcher to see about a biospecimen. The ABL currently does not display information on whether or not clinical data is available to accompany the biospecimens. However, a requester has the ability to solicit clinical data in the request. Once a request is approved, the biospecimen provider will contact the requester to discuss the request (and the requester's questions) before finalizing the invoice and shipment. The ABL is available to the public to browse. In order to request biospecimens from the ABL, the researcher will be required to submit the requested required information. Upon submission of the information, shipment of the requested biospecimen(s) will be dependent on the scientific and institutional review approval. Account required. Registration is open to everyone.. Documented on August 20,2019.A database of integrated genome resources for the silkworm, Bombyx mori. This database provides access to not only genomic data including functional annotation of genes, gene products and chromosomal mapping, but also extensive biological information such as microarray expression data, ESTs and corresponding references. SilkDB will be useful for the silkworm research community as well as comparative genomics. Recently, an international collaboration has been launched to assemble a complete silkworm genome sequence, which is based on the 6? and 3? draft genome

sequences created by Chinese group and Japanese group in 2004 (Mita et al., 2004; Xia et al., 2004), respectively. The genome assembly quality has been greatly improved. Based on a high density SNP genetic map, over 80% of genome sequence could be mapped on 28 chromosomes of the silkworm. The first version of SilkDB was released in 2004. Since that time, the silkworm has become a focus in insect research community and the study of silkworm has been greatly accelerated. Now, we are happy to announce the release of a new version of SilkDB, which updated all of the data, added new information of genome sequence and genes, and provides new tools to facilitate use of the genome database.

Synonyms: SilkDB

Resource Type: data or information resource, database

Keywords: bio.tools

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: SilkDB

Resource ID: SCR_007926

Alternate IDs: r3d100012187, biotools:silkdb

Alternate URLs: <https://bio.tools/silkdb>, <https://doi.org/10.17616/R3435Z>,
<https://doi.org/10.17616/R3435Z>

Record Creation Time: 20220129T080244+0000

Record Last Update: 20260912T200155+0000

Ratings and Alerts

No rating or validation information has been found for SilkDB.

No alerts have been found for SilkDB.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 161 mentions in open access literature.

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

Tong C, et al. (2026) The RNA-binding protein Squid regulates embryonic midgut development via Axin alternative splicing in Bombyx mori. Communications biology, 9(1).

Su H, et al. (2025) Expression profiles analysis and roles in immunity of transient receptor potential (TRP) channel genes in Spodoptera frugiperda. BMC genomics, 26(1), 401.

- Su Y, et al. (2024) Perilipin1 inhibits Nosema bombycis proliferation by promoting Domeless- and Hop-mediated JAK-STAT pathway activation in Bombyx mori. Microbiology spectrum, 12(6), e0367123.
- Xu X, et al. (2024) Genetic Diversity and Differentiation of Silkworm (Bombyx mori) Local Germplasm Resources in China and Uzbekistan. Insects, 15(12).
- Wang M, et al. (2023) Determination of Key Components in the Bombyx mori p53 Apoptosis Regulation Network Using Y2H-Seq. Insects, 14(4).
- Ogata N, et al. (2023) In vivo-like Culture of Monophagous Animal Organ using Dietary Components. Journal of biotechnology and biomedicine, 6(1), 42.
- Wang Z, et al. (2023) Evolution of a fatty acyl-CoA elongase underlies desert adaptation in Drosophila. Science advances, 9(35), eadg0328.
- Lu Y, et al. (2023) Deciphering the Genetic Basis of Silkworm Cocoon Colors Provides New Insights into Biological Coloration and Phenotypic Diversification. Molecular biology and evolution, 40(2).
- Qin S, et al. (2022) BmAbl1 Regulates Silk Protein Synthesis via Glutathione Metabolism in Bombyx mori. Insects, 13(11).
- Zhu K, et al. (2022) Comparative Silk Transcriptomics Illuminates Distinctive Impact of Artificial Selection in Silkworm Modern Breeding. Insects, 13(12).
- Yu L, et al. (2022) Identification of Key Genes Involved in Resistance to Early Stage of BmNPV Infection in Silkworms. Viruses, 14(11).
- Mei Y, et al. (2022) InsectBase 2.0: a comprehensive gene resource for insects. Nucleic acids research, 50(D1), D1040.
- Zhao Z, et al. (2022) A cypovirus encoded microRNA negatively regulates the NF- κ B pathway to enhance viral multiplication in Silkworm, Bombyx mori. Developmental and comparative immunology, 131, 104382.
- Bian HX, et al. (2022) Transcriptomic analysis of Bombyx mori corpora allata with comparison to prothoracic glands in the final instar larvae. Gene, 813, 146095.
- Feng M, et al. (2021) Identification of Silkworm Hemocyte Subsets and Analysis of Their Response to Baculovirus Infection Based on Single-Cell RNA Sequencing. Frontiers in immunology, 12, 645359.
- Nojima Y, et al. (2021) Characterization of Heat Shock Protein 60 as an Interacting Partner of Superoxide Dismutase 2 in the Silkworm, Bombyx mori, and Its Response to the Molting Hormone, 20-Hydroxyecdysone. Antioxidants (Basel, Switzerland), 10(9).
- Zhang X, et al. (2021) The mutation of SPI51, a protease inhibitor of silkworm, resulted in the change of antifungal activity during domestication. International journal of biological macromolecules, 178, 63.
- Zhang K, et al. (2021) Scavenger receptor B8 improves survivability by mediating innate immunity in silkworm, Bombyx mori. Developmental and comparative immunology, 116,

103917.

Wang QH, et al. (2021) Exploring the Terminal Pathway of Sex Pheromone Biosynthesis and Metabolism in the Silkworm. *Insects*, 12(12).

Qiao H, et al. (2021) Transcriptome analysis reveals potential function of long non-coding RNAs in 20-hydroxyecdysone regulated autophagy in *Bombyx mori*. *BMC genomics*, 22(1), 374.