

Resource Summary Report

Generated by [RRID](#) on Aug 10, 2026

Systems Biology Graphical Notation

RRID:SCR_004671

Type: Tool

Proper Citation

Systems Biology Graphical Notation (RRID:SCR_004671)

Resource Information

URL: http://www.sbgng.org/Main_Page

Proper Citation: Systems Biology Graphical Notation (RRID:SCR_004671)

Description: The Systems Biology Graphical Notation (SBGN) project aims to develop high quality, standard graphical languages for representing biological processes and interactions. Each SBGN language is based on the consensus of the broad international SBGN community of biologists, curators and software developers. Over the course of its development many individuals, organizations and companies made invaluable contributions to the SBGN through participating in discussions and meetings, providing feedback on the documentation and worked examples, adopting the standard and spreading the word. Circuit diagrams and Unified Modeling Language diagrams are just two examples of standard visual languages that help accelerate work by promoting regularity, removing ambiguity and enabling software tool support for communication of complex information. Ironically, despite having one of the highest ratios of graphical to textual information, biology still lacks standard graphical notations. The recent deluge of biological knowledge makes addressing this deficit a pressing concern. Toward this goal, we present the Systems Biology Graphical Notation (SBGN), a visual language developed by a community of biochemists, modelers and computer scientists. SBGN consists of three complementary languages: process diagram, entity relationship diagram and activity flow diagram. Together they enable scientists to represent networks of biochemical interactions in a standard, unambiguous way. We believe that SBGN will foster efficient and accurate representation, visualization, storage, exchange and reuse of information on all kinds of biological knowledge, from gene regulation, to metabolism, to cellular signaling. A list of software packages known to provide (or have started to develop) support for SBGN notations is available.

Abbreviations: SBGN

Resource Type: training resource, data or information resource, topical portal, narrative resource, portal, meeting resource, international standard specification, software resource, standard specification

Defining Citation: [PMID:19668183](#)

Funding: New Energy and Industrial Technology Development Organization ;
Okinawa Institute of Science and Technology ;
BBSRC ;
National Institute of Advanced Industrial Science and Technology of Japan ;
European Media Laboratory EML Research GmbH ;
California Institute of Technology; California; USA ;
NIGMS 1R01GM081070-01

Resource Name: Systems Biology Graphical Notation

Resource ID: SCR_004671

Alternate IDs: nlx_66628

Record Creation Time: 20220129T080225+0000

Record Last Update: 20260810T040359+0000

Ratings and Alerts

No rating or validation information has been found for Systems Biology Graphical Notation.

No alerts have been found for Systems Biology Graphical Notation.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Klotz C, et al. (2011) A helminth immunomodulator exploits host signaling events to regulate cytokine production in macrophages. PLoS pathogens, 7(1), e1001248.