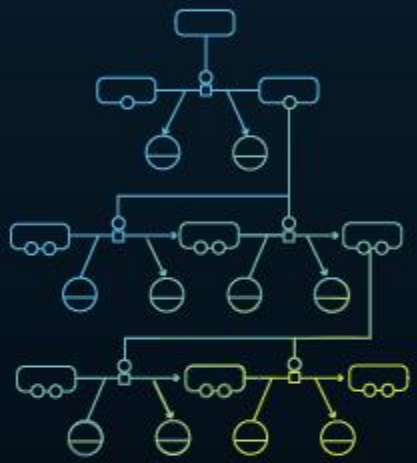
Symbol of the Month

Introduced by Nicolas Le Novère

SBGN Systems Biology Graphical Notation



A Visual Notation for Network Diagrams in Biology

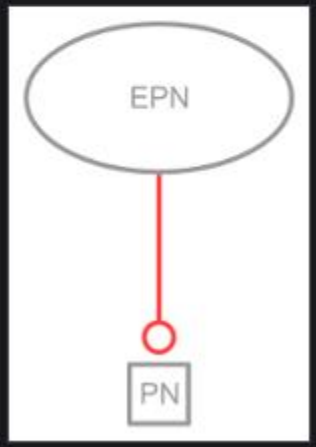
Welcome to the global portal for documentation, news, and other information about the **Systems Biology Graphical Notation** (SBGN) project, an effort to standardize the graphical notation used in maps of biological processes.

Quick start

Learn how to use SBGN	Get involved

Symbol of the month

Catalysis (PD)



SBGN News

(19 Apr. '13) The SBGN User Survey. We need your help to make SBGN better. Find out more here.

SBGN is the work of many people. It would not have been possible without the generous

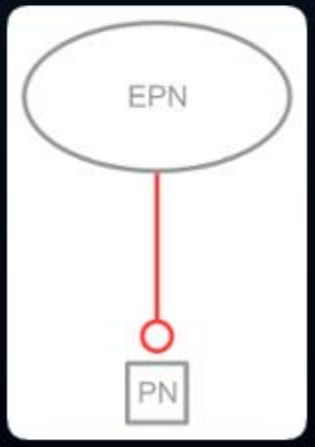
Symbol of the month series

- Jun 2013: PD Catalysis
- Apr 2013: PD Simple Chemical
- Mar 2013: PD Macromolecule
- Feb 2013: PD Consumption, Production and Reversible
- Jan 2013: PD Process
- Dec 2012: PD Inhibition
- Nov 2012: PD Stimulation

CATALYSIS

A *catalysis* is a particular case of *stimulation*, where the effector affects positively the flux of a process represented by the target process. The positive effect on the process is due to the lowering of the activation energy of a reaction. The target extremity of a *catalysis* carries an empty circle.

In SBGN Process Description language, the catalysis of a process is represented by the *catalysis arc*. The target extremity of a *catalysis* carries an empty circle. A *catalysis arc* starts from an *entity pool node* (labelled "EPN" in the figure below, representing for instance a pool of molecules) and ends on a *process node* (labelled "PN" in the figure below, representing for instance a reaction). In the drawing below, the catalysis arc is coloured in red:



The following generic example describes an entity C that catalyses the process transforming an entity A into an entity B.

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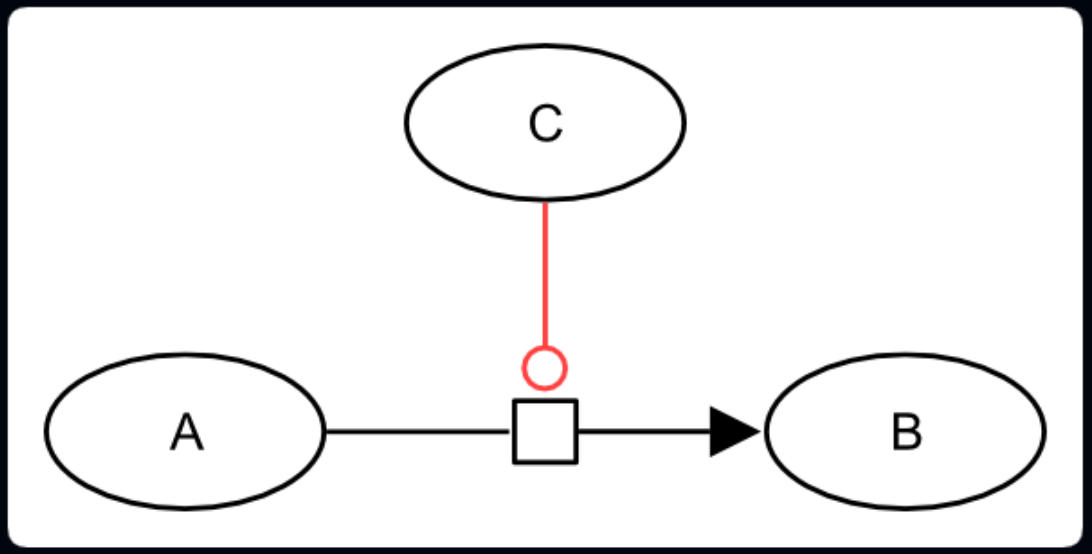

The following actual example describes the conversion of glucose into glucose 6 phosphate, catalysed by the enzyme hexokinase.