

eNOS synthesizes NO

Enikolopov, G., Hemish, J.

European Bioinformatics Institute, New York University Langone Medical Center, Ontario Institute for Cancer Research, Oregon Health and Science University.

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

Fabregat, A., Sidiropoulos, K., Viteri, G., Forner, O., Marin-Garcia, P., Arnau, V. et al. (2017). Reactome pathway analysis: a high-performance in-memory approach. *BMC bioinformatics*, 18, 142. [↗](#)

Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)

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Reactome database release: 88

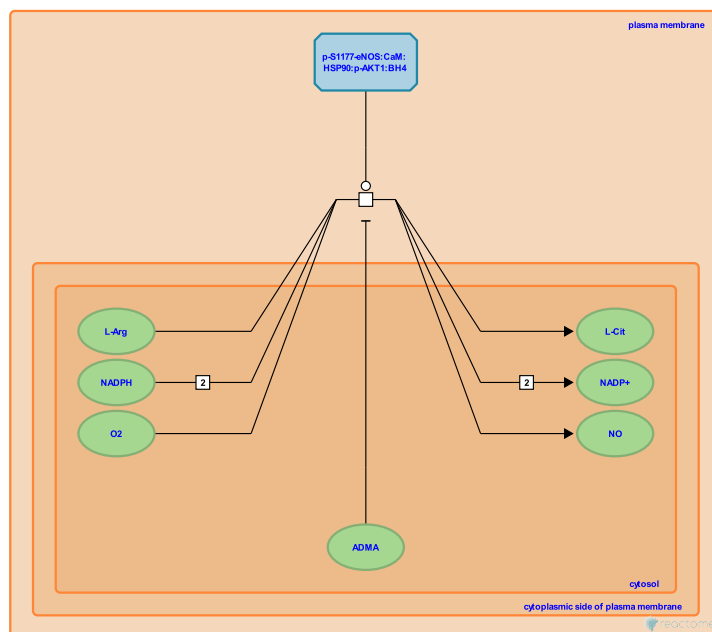
This document contains 1 reaction ([see Table of Contents](#))

eNOS synthesizes NO [↗](#)

Stable identifier: R-HSA-202127

Type: transition

Compartments: cytosol, plasma membrane



Nitric oxide (NO) is produced from L-arginine by the family of nitric oxide synthases (NOS) enzymes, forming the free radical NO and citrulline as byproduct. The cofactor tetrahydrobiopterin (BH₄) is an essential requirement for the delivery of an electron to the intermediate in the catalytic cycle of NOS.

Literature references

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Editions

2007-10-19	Authored	Hemish, J.
2008-02-28	Reviewed	Enikolopov, G.