

NADPH oxidases (version 2019.4) in the IUPHAR/BPS Guide to Pharmacology Database

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Abstract

The two DUOX enzymes were originally identified as participating in the production of hydrogen peroxide as a pre-requisite for thyroid hormone biosynthesis in the thyroid gland [6].

NOX enzymes function to catalyse the reduction of molecular oxygen to superoxide and various other reactive oxygen species (ROS). They are subunits of the NADPH oxidase complex.

Contents

This is a citation summary for NADPH oxidases in the [Guide to Pharmacology](#) database (GtoPdb). It exists purely as an adjunct to the database to facilitate the recognition of citations to and from the database by citation analyzers. Readers will almost certainly want to visit the relevant sections of the database which are given here under database links.

[GtoPdb](#) is an expert-driven guide to pharmacological targets and the substances that act on them. GtoPdb is a reference work which is most usefully represented as an on-line database. As in any publication this work should be appropriately cited, and the papers it cites should also be recognized. This document provides a citation for the relevant parts of the database, and also provides a reference list for the research cited by those parts.

Please note that the database version for the citations given in GtoPdb are to the most recent preceding version in which the family or its subfamilies and targets were substantially changed. The links below are to the current version. If you need to consult the cited version, rather than the most recent version, please contact the GtoPdb curators.

Database links

NADPH oxidases

<http://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=993>

Enzymes

[DUOX1\(dual oxidase 1\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3000>

[DUOX2\(dual oxidase 2\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2999>

[NOX1\(NADPH oxidase 1\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3001>

[NOX2\(cytochrome b-245 beta chain\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3002>

[NOX3\(NADPH oxidase 3\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3003>

[NOX4\(NADPH oxidase 4\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3004>

[NOX5\(NADPH oxidase 5\)](#)

<http://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3005>

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