

Hydrolases & Lipases in GtoPdb v.2023.3

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Abstract

Listed in this section are hydrolases not accumulated in other parts of the Concise Guide, such as monoacylglycerol lipase and acetylcholinesterase. Pancreatic lipase is the predominant mechanism of fat digestion in the alimentary system; its inhibition is associated with decreased fat absorption. CES1 is present at lower levels in the gut than CES2 ([P23141](#)), but predominates in the liver, where it is responsible for the hydrolysis of many aliphatic, aromatic and steroid esters. Hormone-sensitive lipase is also a relatively non-selective esterase associated with steroid ester hydrolysis and triglyceride metabolism, particularly in adipose tissue. Endothelial lipase is secreted from endothelial cells and regulates circulating cholesterol in high density lipoproteins.

Contents

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[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. For further details see [\[24\]](#).

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

Hydrolases & Lipases

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=799>

Enzymes

[AChE\(acetylcholinesterase \(Yt blood group\)\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2465>

[BChE\(butyrylcholinesterase\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2471>

[DAGLα\(diacylglycerol lipase α\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1396>

[DAGLβ\(diacylglycerol lipase β\)](#)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1397>

CES1(carboxylesterase 1)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2592>

NTPDase-1(ectonucleoside triphosphate diphosphohydrolase 1)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2888>

NTPDase-2(ectonucleoside triphosphate diphosphohydrolase 2)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2889>

epoxide hydrolase 2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2970>

FAAH(Fatty acid amide hydrolase)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1400>

Leukotriene A₄ hydrolase

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1395>

LIPE(lipase E, hormone sensitive type)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2593>

LIPG(lipase G, endothelial type)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2591>

MAGL(monoacylglycerol lipase)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1399>

nudix hydrolase 7

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3085>

neuraminidase 1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3214>

neuraminidase 2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3258>

O-GlcNAcase

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3101>

PNLIP(pancreatic lipase)

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2590>

patatin like phospholipase domain containing 2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3253>

PLA₂-G7

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1432>

sPLA₂-2A

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1417>

PLD2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1434>

vanin 1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3063>

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