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Hydrolases & Lipases in GtoPdb v.2025.3

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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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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
CES2(carboxylesterase 2)
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3298
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 A_4 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
lysophospholipase 1
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3290
lysophospholipase 2
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3291
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 domain 2, triacylglycerol lipase
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3253
patatin like domain 3, 1-acylglycerol-3-phosphate O-acyltransferase
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3307
PLA_2-G7
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=1432
$sPLA_2$-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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