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Hydrolases in GtoPdb v.2023.1

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

Enzymes

- AChE(acetylcholinesterase (Cartwright 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 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
- 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
- O-GlcNAcase
  https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=3101
- PNLIP(pancreatic lipase)
  https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2590
- 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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