
Product Data Sheet

Product Name: Hexadecanedioic acid

Cat. No.: GC30677

Chemical Properties

Cas. No. 505-54-4

SMILES O=C(O)CCCCCCCCCCCCCCC(O)=OFormula $C_{16}H_{30}O_4$

M.Wt 286.41

Solubility DMSO: 100 mg/mL (349.15 mM)

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

Hexadecanedioic acid is a dicarboxylic fatty acid that has been found in the suberin component of silver birch (*B. pendula*) outer bark and soil.^{1,2} It stimulates mitochondrial respiration and decreases the production of reactive oxygen species (ROS) induced by rotenone in isolated rat liver mitochondria when used at concentrations of 100 and 40 μM, respectively.³

1. Karnaouri, A., Lange, H., Crestini, C., et al. Chemoenzymatic fractionation and characterization of pretreated birch outer bark ACS Sustainable Chem. Eng. 4(10)5289-5302(2016)
2. Hamer, U., Rumpel, C., and Dignac, M.-F. Cutin and suberin biomarkers as tracers for the turnover of shoot and root derived organic matter along a chronosequence of Ecuadorian pasture soils Eur. J. Soil Sci. 63(6)808-819(2012)
3. Sememova, A.A., V.N., S., Pavlova, S.I., et al. ω-Hydroxypalmitic and α,ω-hexadecanedioic acids as activators of free respiration and inhibitors of H₂O₂ generation in liver mitochondria Biochem. Moscow Suppl. Ser. A14(1)24-33(2020)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA
