
Product Data Sheet

Product Name: 10-Hydroxydecanoic acid (NSC 15139)

Cat. No.: GC33854

Chemical Properties

Cas. No. 1679-53-4

SMILES O=C(O)CCCCCCCCCOFormula $C_{10}H_{20}O_3$

M.Wt 188.26

Solubility DMF: 30 mg/ml, DMSO: 30 mg/ml, DMSO:PBS (pH 7.2) (1:7):
0.12 mg/ml, Ethanol: 10 mg/mlStore
Storage 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 sizes: ship with RT, or blue ice upon request.

Structure **Background**

10-hydroxy Decanoic acid is a hydroxy fatty acid and a major component of worker bee mandibular blend pheromones that has been found in royal jelly.^{1,2} It reduces LPS-induced nitric oxide production in RAW 264.7 cells when used at a concentration of 5 mM.²

1. Plettner, E., Sutherland, G.R., Slessor, K.N., et al. Why not be a queen? Regioselectivity in mandibular secretions of honeybee castes. *J. Chem. Ecol.* 21(7):1017-1029 (1995)

2. Chen, Y.-F., Wang, K., Zhang, Y.-Z., et al. In vitro anti-inflammatory effects of three fatty acids from royal jelly. *Mediators Inflamm.* 2016:3583684 (2016)

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

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