

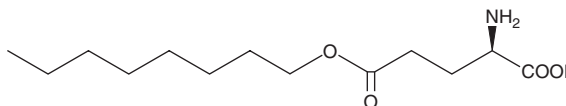
PRODUCT INFORMATION



5-Octyl D-glutamate

Item No. 16106

CAS Registry No.: 149332-65-0
Formal Name: D-glutamic acid, 5-octyl ester
Synonym: 5-Octyl ester D-glutamic acid
MF: C₁₃H₂₅NO₄
FW: 259.4
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

5-Octyl D-glutamate is supplied as a crystalline solid. A stock solution may be made by dissolving the 5-octyl D-glutamate in the solvent of choice. 5-Octyl D-glutamate is soluble in methanol (heated), which should be purged with an inert gas. The solubility of 5-octyl L-glutamate in methanol is approximately 1 mg/ml.

5-Octyl D-glutamate is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

5-Octyl D-glutamate, also known as 5-octyl ester D-glutamate, is a stable, cell-permeable molecule that generates free D-glutamate upon hydrolysis of the ester bond by cytoplasmic esterases. It may be used to increase levels of cytoplasmic D-glutamate. This compound is useful in studies examining the cellular effects of 5-octyl L-glutamate (Item No. 16107) or 5-octyl α -ketoglutarate (Item No. 16105).¹

Reference

1. Chin, R.M., Fu, X., Pai, M.Y., *et al.* The metabolite α -ketoglutarate extends lifespan by inhibiting ATP synthase and TOR. *Nature* (2014).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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