

Product Data Sheet

Product Name: DDA
Cat. No.: GC40697

Chemical Properties

Cas. No. 25152-84-5

SMILES CCCCC\C=C\C=C/C=O

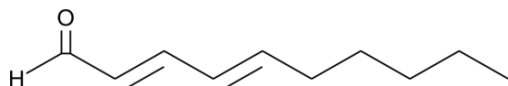
Formula C₁₀H₁₆O M.Wt 152.2

Solubility DMF: 10 mg/ml, DMSO: 10 mg/ml, Ethanol: 10 mg/ml, Ethanol: PBS (pH 7.2) (1:2): .15 mg/ml
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

Lipoxygenase-catalyzed peroxidative decomposition of unsaturated fatty acids occurs within seconds when diatoms are crushed or eaten, producing alkyls. DDA is a prominent member of this class of reactive compounds. Common ω -6 fatty acids such as linoleic acid, dihomo- ω -linolenic acid, and arachidonic acid can give rise to DDA. DDA reduces the hatching rate and has a strong teratogenic effect on the eggs of pelagic copepods, at concentrations around 1 μ M. In human carcinoma Caco2 cells, DDA induces cell growth arrest at around 15 μ M. DDA appears to be a natural defensive chemical designed to limit the reproductive success of copepods, the main predators of diatoms. It may also be a more general inducer of apoptosis.

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

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