

Product Data Sheet

Product Name: 1-Monomyrustin

Cat. No.: GC35068

Chemical Properties

Cas. No. 589-68-4

SMILES CCCCCCCCCCCCC(OCC(O)CO)=O

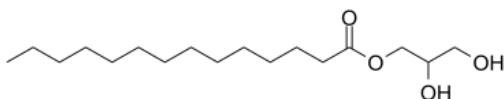
Formula $C_{17}H_{34}O_4$ M.Wt 302.45

Solubility DMSO: 250 mg/mL (826.58 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

1-Monomyrustin, extracted from *Serenoa repens*, inhibits the hydrolysis of 2-oleoylglycerol ($IC_{50}=32 \mu M$) and fatty acid amide hydrolase (FAAH) activity ($IC_{50}=18 \mu M$). 1-Monomyrustin shows antibacterial activity against *Staphylococcus aureus* and *Aggregatibacter actinomycetemcomitans* and also antifungal activity against *Candida albicans*[1][2][3]. Human Endogenous Metabolite

[1]. Shimada H, et al. Biologically active acylglycerides from the berries of saw-palmetto (*Serenoa repens*). J Nat Prod. 1997 Apr;60(4):417-8. [2]. Vandevoorde S, et al. Influence of the degree of

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

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unsaturation of the acyl side chain upon the interaction of analogues of 1-arachidonoylglycerol with monoacylglycerol lipase and fatty acid amide hydrolase. Biochem Biophys Res Commun. 2005 Nov 11;337(1):104-9. [3]. Jumina, et al. Monomyristin and Monopalmitin Derivatives: Synthesis and Evaluation as Potential Antibacterial and Antifungal Agents. Molecules. 2018 Nov 29;23(12). pii: E3141

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