2-Oleoyl Glycerol

Item No. 16537

CAS Registry No.: 3443-84-3
Formal Name: 2-hydroxy-1-(hydroxymethyl)ethyl ester-9Z-octadecenoic acid
Synonyms: 2-Monoolein, 2-OG
MF: C_{21}H_{40}O_4
FW: 356.5
Purity: ≥98%
Stability: ≥1 year at -80°C
Supplied as: A solution in ethanol

Laboratory Procedures

For long term storage, we suggest that 2-oleoyl glycerol (2-OG) be stored as supplied at -80°C. It should be stable for at least one year.

2-OG is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of 2-OG in ethanol is approximately 15 mg/ml and approximately 10 mg/ml in DMSO and DMF.

2-OG is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 2-OG should be diluted with the aqueous buffer of choice. 2-OG has a solubility of approximately 0.25 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

2-OG is a natural monoacylglycerol with an 18:1 oleoyl group at the sn-2 position of glycerol. 2-OG, like 2-arachidonoyl glycerol (2-AG; Item No. 62160), is metabolized by monoacylglycerol lipase, but, unlike 2-AG, it is not metabolized by cyclooxygenases or lipoxygenases.1-3 2-OG is an agonist of GPR119 (EC_{50} = 2.5 µM), stimulating the release of glucagon-like peptide-1 from intestinal L-cells.4

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16537

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent with your order to your institution.

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