ZK118182 isopropyl ester

Item No. 13673

CAS Registry No.: 154927-31-8
Formal Name: \[\begin{array}{c}
\text{C}_{23}\text{H}_{37}\text{ClO}_{5}
\end{array}\]

MF: C_{23}H_{37}ClO_{5}

FW: 429.0

Purity: ≥98%

Stability: ≥1 year at -20°C

Supplied as: A solution in methyl acetate

Laboratory Procedures

For long term storage, we suggest that ZK118182 isopropyl ester be stored as supplied at -20°C. It should be stable for at least one year.

ZK118182 isopropyl ester is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 ZK118182 isopropyl ester in ethanol, DMSO, and DMF is approximately 12.5, 2, and 3 mg/ml, respectively.

ZK118182 isopropyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of ZK118182 isopropyl ester should be diluted with the aqueous buffer of choice. ZK118182 isopropyl ester has a solubility of approximately 0.1 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Elevated intraocular pressure (IOP) is an important risk factor in developing glaucoma. Certain prostaglandins (PGs) such as PGF\textsubscript{2α} and PGD\textsubscript{2}, have been shown to reduce IOP. ZK118182 is a PG analog that has potent DP-agonist activity (EC\textsubscript{50} = 16.5 nM) and a high nanomolar affinity for the DP receptor (K\textsubscript{i} = 74 nM).\textsuperscript{1} ZK118182 isopropyl ester is a prodrug formulation of ZK118182 designed to enhance corneal absorption. At 0.03 μg, ZK118182 isopropyl ester has been shown to lower monkey and rabbit IOP 46% and 20%, respectively, two hours after dosing, demonstrating a much more potent effect compared to the free acid.\textsuperscript{2}

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/13673

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

MATERIAL 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 Material Safety Data Sheet, which has been sent via email to your institution.

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