

Certificate of Analysis

Print Date: Nov 12th 2019

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Product Name: MK 886 Catalog No.: 1311 Batch No.: 3

CAS Number: 118414-82-7

IUPAC Name: 1-[(4-Chlorophenyl)methyl]-3-[(1,1-dimethylethyl)thio]-α,α-dimethyl-5-(1-methylethyl)-1*H*-Indole-2-propanoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₇H₃₄CINO₂S

Batch Molecular Weight: 472.08

Physical Appearance: White solid

Solubility: ethanol to 5 mM

DMSO to 100 mM

Storage: Store at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.38$ (Dichloromethane:Methanol [95:5])

HPLC: Shows 99.1% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 68.69 7.26 2.97 Found 68.31 6.95 3.17



Product Information

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Description:

Potent inhibitor of 5-lipoxygenase-activating protein (FLAP) (IC $_{50}$ = 30 nM for inhibition of [125 I]-L-691,678 photoaffinity labelling). Inhibits leukotriene biosynthesis (IC $_{50}$ = 3 nM in human polymorphonuclear leukocytes). Also moderately potent PPAR α antagonist (IC $_{50}$ = 0.5-1 µM). Orally active in vivo.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₇H₃₄ClNO₂S

Batch Molecular Weight: 472.08 Physical Appearance: White solid

Minimum Purity: >98%

Batch Molecular Structure:

inhibitors. Mol. Pharmacol. 41 267. PMID: 1538707.

Storage: Store at RT

Solubility & Usage Info:

ethanol to 5 mM DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Other Information:

INFORMATION FOR CUSTOMERS IN THE UK ONLY

This product is a Schedule 1 Home Office controlled substance and customers in the UK are required to hold the relevent licence or be exempt from restrictions in order to purchase and posess this material.

References:

Kehrer *et al* (2001) Inhibition of peroxisome-proliferator-activated receptor (PPAR)α by MK886. Biochem.J. *356* 899. PMID: 11389700. **Mancini** *et al* (1992) 5-Lipoxygenase-activating protein is the target of a novel hybrid of two classes of leukotriene biosynthesis

Dixon et al (1990) Requirement of a 5-lipoxygenase-activating protein for leukotriene synthesis. Nature 343 282. PMID: 2300173.

Gillard *et al* (1989) L-663,536 (MK-886) (3-[1-(4-chlorobenzyl)-3-t-butyl-thio-5-isopropylindol-2-yl]-2,2-dimethylpropanoic acid), a novel, orally active leukotriene biosynthesis inhibitor. Can.J.Physiol.Pharmacol. *67* 456. PMID: 2548691.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use