

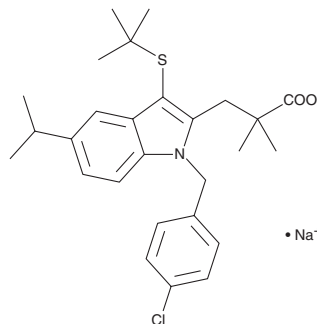
PRODUCT INFORMATION



MK-886 (sodium salt)

Item No. 10133

CAS Registry No.: 118427-55-7
Formal Name: 1-[(4-chlorophenyl)methyl]-3-[(1,1-dimethylethyl)thio]- α,α -dimethyl-5-(1-methylethyl)-1H-indole-2-propanoic acid, sodium salt
MF: $C_{27}H_{33}ClNO_2S \cdot Na$
FW: 494.1
Purity: $\geq 99\%$
UV/Vis.: λ_{max} : 226, 289 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

MK-886 (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the MK-886 (sodium salt) in an organic solvent purged with an inert gas. MK-886 (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of MK-886 (sodium salt) in ethanol and DMSO is approximately 20 mg/ml and approximately 30 mg/ml in DMF.

MK-886 (sodium salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MK-886 (sodium salt) should first be dissolved in DMF and then diluted with the aqueous buffer of choice. MK-886 (sodium salt) has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Arachidonic acid (Item No. 90010) and selected other polyunsaturated fatty acids are stereoselectively oxygenated at carbon 5 by the non-heme iron containing enzyme 5-lipoxygenase (5-LO).¹ The intervention of a second protein, 5-LO-activating protein (FLAP), is required before 5-LO can become catalytically active.² MK-886 binds to FLAP with high-affinity and prevents 5-LO activation. MK-886 inhibits leukotriene biosynthesis in leukocytes with an IC_{50} of 2.5 nM.³ In human whole blood, leukotriene biosynthesis is inhibited by MK-886 with an IC_{50} of 1.1 μM .

References

1. Ford-Hutchinson, A.W., Gresser, M., and Young, R.N. 5-Lipoxygenase. *Annu. Rev. Biochem.* **63**, 383-417 (1994).
2. Abramovitz, M., Wong, E., Cox, M.E., *et al.* 5-Lipoxygenase-activating protein stimulates the utilization of arachidonic acid by 5-lipoxygenase. *Eur. J. Biochem.* **215**, 105-111 (1993).
3. Dixon, R.A.F., Diehl, R.E., Opas, E., *et al.* Requirement of a 5-lipoxygenase-activating protein for leukotriene synthesis. *Nature* **343**, 282-284 (1990).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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