

Certificate of Analysis

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Product Name: Licarbazepine

Catalog No.: 3865

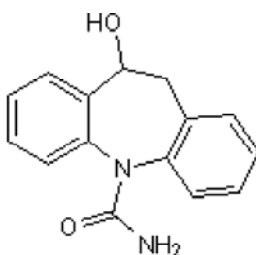
Batch No.: 2

CAS Number: 29331-92-8

IUPAC Name: 10,11-Dihydro-10-hydroxy-5*H*-dibenz(*Z*)[*b,f*]azepin-5-carboxamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₅H₁₄N₂O₂
Batch Molecular Weight: 254.28
Physical Appearance: Off-white solid
Solubility: DMSO to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100.0% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	70.85	5.55	11.02
Found	70.21	5.55	10.99

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

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Description:

Licarbazepine is an active metabolite of oxcarbazepine (Cat. No. 3864). Produces dose-dependent inhibition of glutamatergic excitatory postsynaptic potentials (EPSPs). Displays anticonvulsant activity; exhibits minor potentiation of GABA_A receptor currents.

Physical and Chemical Properties:

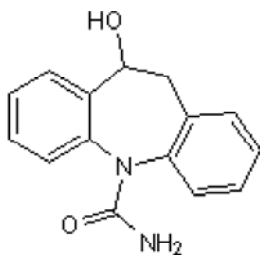
Batch Molecular Formula: C₁₅H₁₄N₂O₂

Batch Molecular Weight: 254.28

Physical Appearance: Off-white solid

Minimum Purity: ≥98%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

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.

References:

Zheng *et al* (2009) Oxcarbazepine, not its active metabolite, potentiates GABA_A activation and aggravates absence seizures. *Epilepsia* **50** 83. PMID: 18717705.

Benes *et al* (1999) Anticonvulsant and sodium channel-blocking properties of novel 10,11-dihydro-5*H*-dibenz[*b*,*f*]azepine-5-carboxamide derivatives. *J.Med.Chem.* **42** 2582. PMID: 10411478.

Calabresi *et al* (1995) Action of GP 47779, the active metabolite of oxcarbazepine, on the corticostriatal system. I. Modulation of corticostriatal synaptic transmission. *Epilepsia* **36** 990. PMID: 7555963.

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