

# Certificate of Analysis

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**Product Name:** Licarbazepine

**Catalog No.:** 3865

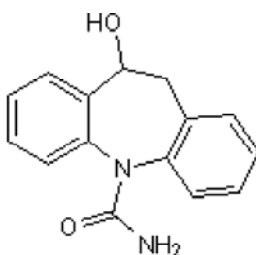
**Batch No.:** 1

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:** C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 254.28  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 99.9% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	70.85	5.55	11.02
Found	70.46	5.57	10.97

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

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**1**

CAS Number: 29331-92-8

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

**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<sub>A</sub> receptor currents.

**Physical and Chemical Properties:**

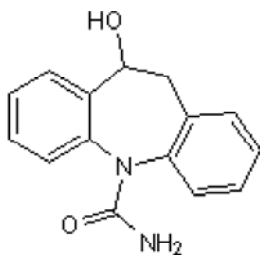
Batch Molecular Formula: C<sub>15</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>

Batch Molecular Weight: 254.28

Physical Appearance: White solid

**Minimum Purity:** ≥98%

**Batch Molecular Structure:**



**References:**

**Zheng *et al*** (2009) Oxcarbazepine, not its active metabolite, potentiates GABA<sub>A</sub> 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-5H-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.

**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.

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