

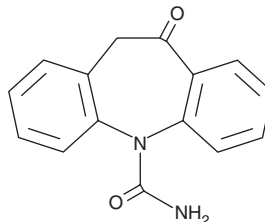
PRODUCT INFORMATION



Oxcarbazepine

Item No. 17340

CAS Registry No.: 28721-07-5
Formal Name: 10,11-dihydro-10-oxo-5H-dibenz[b,f]azepine-5-carboxamide
Synonym: GP47680
MF: C₁₅H₁₂N₂O₂
FW: 252.3
Purity: ≥98%
UV/Vis.: λ_{max}: 256, 308 nm
Supplied as: A crystalline
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Oxcarbazepine is supplied as a crystalline solid. A stock solution may be made by dissolving the oxcarbazepine in the solvent of choice, which should be purged with an inert gas. Oxcarbazepine is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of oxcarbazepine in these solvents is approximately 10 and 20 mg/ml, respectively.

Oxcarbazepine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, oxcarbazepine should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Oxcarbazepine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Oxcarbazepine is a prodrug form of the antiepileptic compound 10,11-dihydro-10-hydroxy carbamazepine (Item No. 18467).^{1,2} It inhibits high-frequency repetitive firing of rat spinal cord neurons when used at a concentration of 1 μM.² Oxcarbazepine protects against electroshock-induced tonic hindlimb extension (ED₅₀ = 10-20 mg/kg), as well as seizures induced by pentylenetetrazole (PTZ; Item No. 18682) or picrotoxin (Item No. 20771) in rodents (ED₅₀s = 23-30 and 150-250 mg/kg, respectively). Formulations containing oxcarbazepine have been used in the treatment of epileptic seizures.

References

1. Ambrósio, A.F., Soares-Da-Silva, P., Carvalho, C.M., *et al.* Mechanisms of action of carbamazepine and its derivatives, oxcarbazepine, BIA 2-093, and BIA 2-024. *Neurochem. Res.* **27(1-2)**, 121-130 (2002).
2. McLean, M.J., Schmutz, M., Wamil, A.W., *et al.* Oxcarbazepine: Mechanisms of action. *Epilepsia* **36(Suppl 3)**, S5-S9 (1994).

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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