

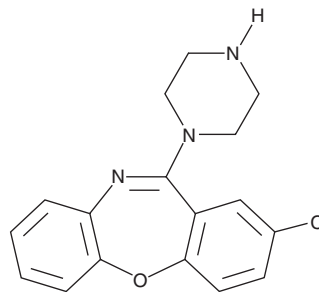
PRODUCT INFORMATION



Amoxapine

Item No. 17347

CAS Registry No.: 14028-44-5
Formal Name: 2-chloro-11-(1-piperazinyl)-dibenz[b,f][1,4]oxazepine
Synonym: CL-67772
MF: C₁₇H₁₆ClN₃O
FW: 313.8
Purity: ≥95%
UV/Vis.: λ_{max}: 210, 252 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Amoxapine is supplied as a crystalline solid. A stock solution may be made by dissolving the amoxapine in the solvent of choice. Amoxapine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of amoxapine in ethanol is approximately 1 mg/ml and approximately 10 mg/ml in DMSO and DMF.

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

Description

Amoxapine is a tetracyclic antidepressant with a wide range of pharmacological effects. It inhibits norepinephrine and serotonin reuptake, binding the respective transporters with K_d values of 16 and 58 nM.¹ It has also been shown to act as either an antagonist or inverse agonist at serotonin 5-HT_{2A}, 2B, 2C, 3, 6, 7 (K_is = 1 and 2 nM for 5-HT_{2A} and 5-HT_{2C}, respectively), dopamine D₂, 3, 4 (K_d = 160 nM for D₂), α₁-adrenergic (K_d = 50 nM), and histamine H₁ (K_d = 25 nM) receptors.^{2,3}

References

1. Tatsumi, M., Groshan, K., Blakely, R.D., *et al.* Pharmacological profile of antidepressants and related compounds at human monoamine transporters. *Eur. J. Pharmacol.* **340(2-3)**, 249-258 (1997).
2. Pälvimäki, E.P., Roth, B.L., Majasuo, H., *et al.* Interactions of selective serotonin reuptake inhibitors with the serotonin 5-HT_{2C} receptor. *Psychopharmacology (Berl)* **126(3)**, 234-240 (1996).
3. Richelson, E. and Nelson, A. Antagonism by antidepressants of neurotransmitter receptors of normal human brain *in vitro*. *J. Pharmacol. Exp. Ther.* **230(1)**, 94-102 (1984).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/04/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM