

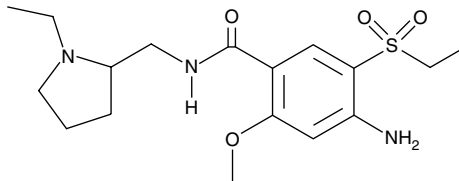
Product Information



Amisulpride

Item No. 14619

CAS Registry No.: 71675-85-9
Formal Name: 4-amino-N-[(1-ethyl-2-pyrrolidinyl)methyl]-5-(ethylsulfonyl)-2-methoxybenzamide
Synonyms: DAN 2163, Solian
MF: C₁₇H₂₇N₃O₄S
FW: 369.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 225, 278 nm



Laboratory Procedures

For long term storage, we suggest that amisulpride be stored as supplied at -20°C. It should be stable for at least two years.

Amisulpride is supplied as a crystalline solid. A stock solution may be made by dissolving the amisulpride in the solvent of choice. Amisulpride is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of amisulpride in ethanol is approximately 1 mg/ml and approximately 15 mg/ml in DMSO and DMF.

Amisulpride is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, amisulpride should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Amisulpride 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.

Amisulpride is a potent and selective antagonist of the dopamine receptors D₂ and D₃ (K_i = 2.8 and 3.2 nM, respectively, for the human receptors).¹ It has no or low activity at numerous other receptors and channels.¹ Amisulpride has found use as an antipsychotic in schizophrenia and related illnesses.²⁻³ It is also a potent antagonist of the serotonin (5-HT) receptors 5-HT_{2B} and 5-HT₇ (K_i = 13, 11.5 nM, respectively), with the latter effect thought to explain the antidepressant actions of amisulpride.⁴

References

1. Schoemaker, H., Claustre, Y., Fage, D., *et al.* Neurochemical characteristics of amisulpride, an atypical dopamine D₂/D₃ receptor antagonist with both presynaptic and limbic selectivity. *J. Pharmacol. Exp. Ther.* **280**(1), 83-97 (1997).
2. Lepping, P., Sambhi, R.S., Whittington, R., *et al.* Clinical relevance of findings in trials of antipsychotics: Systematic review. *Br. J. Psychiatry* **198**(5), 341-345 (2011).
3. Rummel-Kluge, C., Komossa, K., Schwarz, S., *et al.* Second-generation antipsychotic drugs and extrapyramidal side effects: A systematic review and meta-analysis of head-to-head comparisons. *Schizophr. Bull.* **38**(1), 167-177 (2012).
4. Abbas, A.I., Hedlund, P.B., Huang, X.-P., *et al.* Amisulpride is a potent 5-HT₇ antagonist: Relevance for antidepressant actions *in vivo*. *Psychopharmacology (Berl)* **205**(1), 119-128 (2009).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/14619

Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 07/18/2013