

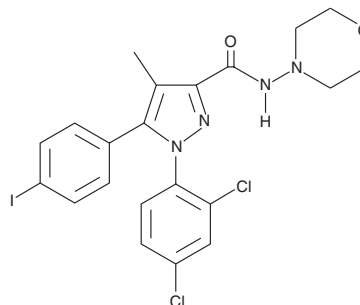
PRODUCT INFORMATION



AM281

Item No. 10006972

CAS Registry No.: 202463-68-1
Formal Name: 1-(2,4-dichlorophenyl)-5-(4-iodophenyl)-4-methyl-N-4-morpholinyl-1H-pyrazole-3-carboxamide
MF: C₂₁H₁₉Cl₂IN₄O₂
FW: 557.2
Purity: ≥98%
UV/Vis.: λ_{max}: 249 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

AM281 is supplied as a crystalline solid. A stock solution may be made by dissolving the AM281 in the solvent of choice, which should be purged with an inert gas. AM281 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of AM281 in these solvents is approximately 1 mg/ml.

AM281 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AM281 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AM281 has a solubility of approximately 0.2 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AM281 is a potent and selective central cannabinoid (CB₁) receptor antagonist/inverse agonist (K_s = 12 nM and 4,200 nM for CB₁ and CB₂, respectively).^{1,2} Structurally, it is an analog of the CB₁ inverse agonist rimonabant (Item No. 9000484).² It has no effect on the vanilloid TRPV1 receptor.³ AM281 has been used to evaluate the potential effects of compounds at CB₁.^{4,5} It has also been used to study the membrane localization and cycling of CB₁.⁶

References

1. Lan, R., Lu, Q., Fan, P., et al. *AAPS Pharmsci.* **1(3)**, 1-7 (1999).
2. Gatley, S.J., Lan, R., Pyatt, B., et al. *Life Sci.* **61(14)**, PL-191-PL-197 (1997).
3. Jerman, J.C., Gray, J., Brough, S.J., et al. *Br. J. Anaesth.* **89(6)**, 882-887 (2002).
4. Baker, C.L. and McDougall, J.J. *Br. J. Pharmacol.* **142(8)**, 1361-1367 (2004).
5. Brown, I., Cascio, M.G., Wahle, K.W.J., et al. *Carcinogenesis* **31(9)**, 1584-1591 (2010).
6. Letierrier, C., Bonnard, D., Carrel, D., et al. *J. Biol. Chem.* **279(34)**, 36013-36021 (2004).

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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