

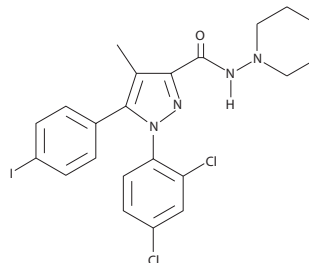
Product Information



AM251

Catalog No. 71670

CAS Registry No.: 183232-66-8
Formal Name: 1-(2,4-dichlorophenyl)-5-(4-iodophenyl)-4-methyl-N-1-piperidinyl-1H-pyrazole-3-carboxamide
MF: C₂₂H₂₁Cl₂IN₄O
FW: 555.2
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that AM251 be stored as supplied at -20°C. It will be stable for at least one year.

AM251 is supplied as a crystalline solid. A stock solution may be made by dissolving the AM251 in an organic solvent purged with an inert gas. AM251 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AM251 in these solvents is approximately 10 mg/ml. AM251 will be stable for at least six months in these solvents if stored at -20°C.

AM251 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AM251 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AM251 has a solubility of approximately 14 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

SR 141716A is a biarylpyrazole compound which has been considered for many years as the prototypical cannabinoid receptor antagonist.¹ Some very close structural relatives of SR 141716A were recently prepared and tested for their ability to act as antagonists of the CB₁ receptor.² AM251 is one of these analogs, wherein the *p*-chloro group attached to the phenyl substituent at C-5 of the pyrazole ring is replaced with a *p*-iodo group. The resulting compound exhibits slightly better binding affinity for the CB₁ receptor with a K_i value of 7.5 nM compared to SR 141716A, which has a K_i value of 11.5 nM. However AM251 is about two-fold more selective for the CB₁ receptor as compared with SR 141716A.²

References

1. Rinaldi-Carmona, M., Barth, F., Héaulme, M., *et al.* SR141716A, a potent and selective antagonist of the brain cannabinoid receptor. *FEBS Lett.* **350**, 240-244 (1994).
2. Lan, R., Liu, Q., Fan, P., *et al.* Structure-activity relationships of pyrazole derivatives as cannabinoid receptor antagonists. *J. Med. Chem.* **42**, 769-776 (1999).

Related Product

Arachidonic Acid-(2-aminoethyl)-ester - Cat. No. 91050

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WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

MATERIAL 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 Material Safety Data Sheet, which has been sent under separate cover to the MSD supervisor at your institution.

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