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DATASHEET

AM281

Product overview

Name	AM281
Cat No	HB2312
Biological action	Antagonist
Purity	>98%
Description	Potent, selective CB_1 receptor antagonist / inverse agonist

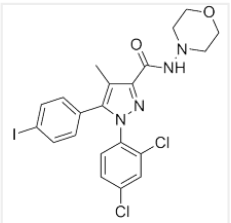
Biological Data

Biological description	AM 281 is a potent, selective CB_1 receptor antagonist / inverse agonist which is selective for CB_1 over CB_2 receptors (K_i values are 12 nM and 4200 nM respectively). AM 281 modulates locomotor activity and shows neuroprotective actions in septic shock.

Solubility & Handling

Storage instructions	+4°C (desiccate)
Solubility overview	Soluble in DMSO (50 mM with heating)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1-(2,4-Dichlorophenyl)-5-(4-iodophe nyl)-4-methyl-*N*-4-morpholinyl-1*H*-pyrazole-3-carbox amide
Molecular Weight	557.22
Chemical structure	
Molecular Formula	$C_{21}H_{19}Cl_2IN_4O_2$
CAS Number	202463-68-1
PubChem identifier	4302962
SMILES	CC1=C(N(N=C1C(=O)NN2CCOCC2)C3=C(C=C(C=C3)Cl)Cl)C4=CC=C(C=C4)I
Source	Synthetic
InChi	InChI=1S/C21H19Cl2IN4O2/c1-13-19(21(29)26-27-8-10-30-11-9-27)25-28(18-7-4-15(22)12-17(18)23)20(13)14-2-5-16(24)6-3-14/h2-7,12H,8-11H2,1H3,(H,26,29)
InChiKey	AJFFBPZYXRNAIC-UHFFFAOYSA-N
MDL number	MFCD01861180
Appearance	White solid

References

Design and synthesis of the CB1 selective cannabinoid antagonist AM281: a potential human SPECT ligand.

Lan et al (1999) AAPS PharmSci. 1(2)
PubMedID 11741201

Effect of the cannabinoid receptor SPECT agent, AM 281, on hippocampal acetylcholine release from rat brain slices.

Gifford et al (1997) Neurosci Lett. 238(1-2)
PubMedID 9464661

Cannabinoid antagonist AM 281 reduces mortality rate and neurologic dysfunction after cecal ligation and puncture in rats.

Kadoi et al (2005) Crit Care Med 33(11)
PubMedID 16276190