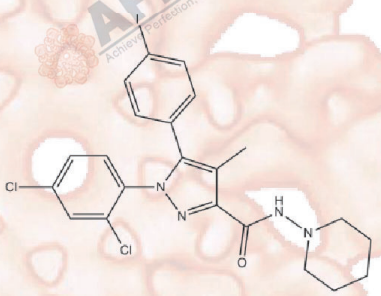
Product Data Sheet

AM251



Cat. No.:	B1427
CAS No.:	183232-66-8
Formula:	C22H21Cl2IN4O
M.Wt:	555.24
Synonyms:	
Target:	GPCR/G protein
Pathway:	Cannabinoid Receptor
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

⩾55.5 mg/mL in DMSO with gentle warming; insoluble in H2O; ⩾6.81 mg/mL in EtOH

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	1.8010 mL	9.0051 mL	18.0102 mL
5 mM	0.3602 mL	1.8010 mL	3.6020 mL
10 mM	0.1801 mL	0.9005 mL	1.8010 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Potent CB1 antagonist
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	A375 human melanoma cells; Raw 264.7 macrophages
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	5 μM for 48 h and 72 h; or 0.5, 2 μM for 16 h

	Applications:	Treatment with AM251 (5 μmol/l) induced apoptosis, G2/M cell cycle arrest, and cAMP increase in A375 human melanoma cells. Moreover, AM-251 inhibited 7-ketocholesterol induced apoptosis of Raw 264.7 macrophages.
In Vivo	**Animal experiment**	
	Animal models:	Adult male Sprague-Dawley rats model
	Dosage form:	3 mg/kg, i.p., for 1-4 h
	Applications:	AM251 increased paraoxon and chlorpyrifos oxon toxicity in rats. Moreover, AM-251 (1-4 μM) inhibited sterol esterification in vivo. AM-251 inhibited acetylated LDL-stimulated cholesterol esterification in resident peritoneal macrophages from wild type and CB2 null mice.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

1. Thewke, D., Freeman-Anderson, N., Pickle, T., Netherland, C. and Chilton, C. (2009) AM-251 and SR144528 are acyl CoA:cholesterol acyltransferase inhibitors. Biochem Biophys Res Commun. 381, 181-186
2. Carpi, S., Fogli, S., Romanini, A., Pellegrino, M., Adinolfi, B., Podesta, A., Costa, B., Da Pozzo, E., Martini, C., Breschi, M. C. and Nieri, P. (2015) AM251 induces apoptosis and G2/M cell cycle arrest in A375 human melanoma cells. Anticancer Drugs. 26, 754-762
3. Liu, J. and Pope, C. (2015) The cannabinoid receptor antagonist AM251 increases paraoxon and chlorpyrifos oxon toxicity in rats. Neurotoxicology. 46, 12-18

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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