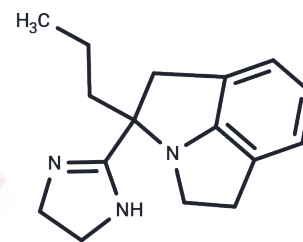


Derigidole

Chemical Properties

CAS No. :	122830-14-2
Formula:	C ₁₆ H ₂₁ N ₃
Molecular Weight:	255.36
Storage:	Pure form: -20°C for 3 years In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Derigidole (SL 86-0715) is a peripheral adrenergic receptor antagonist that is a selective inhibitor of alpha2 receptors. Derigidole inhibits colistin and Idazoxan but does not show activity against prazosin and rat cortical and human platelet α 2-adrenergic receptors.
Targets(IC50)	Adrenergic Receptor
In vitro	Derigidole is a specific inhibitor of α 2-receptors. Derigidole inhibits the binding of [3H] clonidine and [3H] imidazole x, while showing no inhibitory effect on the binding of [3H] prazosin to rat cortex and human platelet α 2-adrenergic receptors. Furthermore, it demonstrates greater effectiveness than idazolidine in selectively targeting peripheral receptors.[1]
In vivo	In mouse pancreatic beta-cells that both derigidole and SL86.0714 inhibit ATP-sensitive K ⁺ channel with similar potency whereas alpha2-adrenoceptors are blocked only by derigidole. In diabetic rats, SL84.0418 and derigidole (10 mg/kg i.p.) fully normalized glucose tolerance whereas SL86.0714 and tolbutamide only slightly improved it. Five min after derigidole administration in mice a marked and short lasting rise in insulin levels was observed, followed by a progressive reduction of glycemia.[2]

Solubility Information

Solubility	DMSO: 32.5 mg/mL (127.27 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.916 mL	19.5802 mL	39.1604 mL
5 mM	0.7832 mL	3.916 mL	7.8321 mL
10 mM	0.3916 mL	1.958 mL	3.916 mL
50 mM	0.0783 mL	0.3916 mL	0.7832 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Natali A, et al. Effects of acute alpha 2-blockade on insulin action and secretion in humans. *Am J Physiol.* 1998;274(1):57-64.

Guillot E, et al. Mechanisms of the hypoglycemic effects of the alpha2-adrenoceptor antagonists SL84.0418 and deriglidole. *Life Sci.* 1998;62(9):839-852.

Jonas JC, et al. The imidazoline SL 84.0418 shows stereoselectivity in blocking alpha 2-adrenoceptors but not ATP-sensitive K⁺ channels in pancreatic B-cells. *Eur J Pharmacol.* 1994;264(1):81-84.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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