Product Data Sheet

Product Name: Rilmenidine
Cat. No.: GC60325

Chemical Properties

Cas. No.	54187-04-1		
SMILES	C1(NC(C2CC2)C3CC3)=NCCO1		
Formula	$C_{10}H_{16}N_2O$	M.Wt	180.25
Solubility	DMF: 30 mg/ml,DMSO: 30 mg/ml,Ethanol: 30 mg/ml,Ethanol:PBS (pH 7.2) (1:6): 0.14 mg/ml	Storage	
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Rilmenidine		

Background

Rilmenidine is an antihypertensive agent.[1] It binds to imidazole receptors in bovine rostral ventrolateral medulla homogenates (K_i = 6.1 nM), as well as α_2-adrenergic receptors in bovine prefrontal cortex homogenates (K_i = 87 nM). Rilmenidine induces hypotension and bradycardia in anesthetized rats (ED_{50}s = 0.25 and 0.35 mg/kg, respectively). It also reduces mean arterial pressure and renal sympathetic nerve activity in a rabbit model of renal hypertension induced by a renal artery clip when administered at a dose of 2.5 mg/kg.[2] Rilmenidine (1 ?M) increases levels of LC3-II, a marker of autophagy, in PC12 cells.[3] Formulations containing rilmenidine have been used in the treatment of hypertension.

1.Gomez, R.E., Ernsbarger, P., Feinland, G., et al.Rilmenidine lowers arterial pressure via imidazole receptors in brainstem C1 areaEur. J. Pharmacol.195(2)181-191(1991)
2.Burke, S.L., Evans, R.G., and Head, G.A.Effects of chronic sympatho-inhibition on renal excretory function in renovascular hypertensionJ. Hypertens.29(5)945-952(2011)
3.Williams, A., Sarkar, S., Cuddon, P., et al.Novel targets for Huntington's disease in an

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mTOR-independent autophagy pathwayNat. Chem. Biol.4(5)295-305(2008)

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