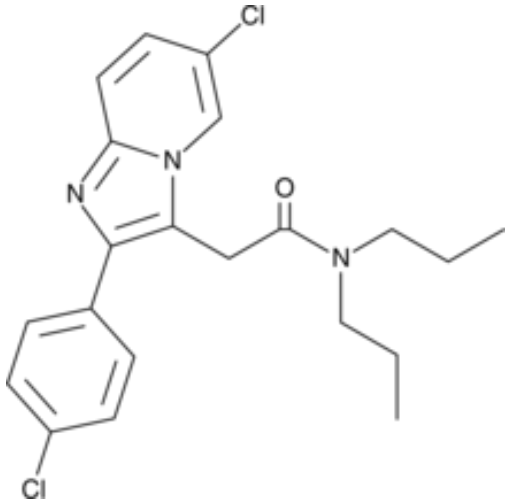
Product Data Sheet

Product Name: Alpidem
Cat. No.: GC49199

Chemical Properties

Cas. No.	82626-01-5		
SMILES	O=C(CC1=C(C2=CC=C(C=C2)Cl)N=C3C=CC(Cl)=CN31)N(CCC)CCC		
Formula	C21H23Cl2N3O	M.Wt	404.3
Solubility	DMSO : 25 mg/mL (61.83 mM; Need ultrasonic)	Storage	-20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C 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



Background

Alpidem is an anxiolytic agent.[1] It selectively binds to $\alpha_1\beta_2\gamma_2$ subunit-containing $GABA_A$ receptors over $\alpha_5\beta_2\gamma_2$ subunit-containing $GABA_A$ receptors in HEK293 cells (IC_{50}s = 0.017 and ≥10 μM, respectively, for the recombinant rat receptors).[2] Alpidem also binds to the $GABA_A$/benzodiazepine receptor complex and translocator protein 18 kDa (TSPO) with IC_{50} values of 0.028 and 0.0079 μM,

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respectively.[3] It reduces marble burying in mice, indicating anxiolytic activity, with a minimum effective dose (MED) of 10 mg/kg.[4] Unlike the benzodiazepine alprazolam, alpidem does not induce sedation in mice when administered at doses up to 2 mg/kg.[5] Formulations containing alpidem have previously been used in the treatment of generalized anxiety disorder.

1.Skolnick, P.Anxioselective anxiolytics: On a quest for the holy grailTrends Pharamacol. Sci.33(11)611-620(2012) 2.Faure-Halley, C., Graham, D., Arbilla, S., et al.Expression and properties of recombinant α1β2γ2 and α5β2γ2 forms of the rat GABAA receptorEur. J. Pharmacol.246(3)283-287(1993) 3.Trapani, G., Franco, M.C., Ricciardi, L., et al.Synthesis and binding affinity of 2-phenylimidazo[1,2-alpha]pyridine derivatives for both central and peripheral benzodiazepine receptors. A new series of high-affinity and selective ligands for the peripheral typeJ. Med. Chem.40(19)3109-3118(1997) 4.Zivkovic, B., Morel, E., Joly, D., et al.Pharmacological and behavioral profile of alpidem as an anxiolyticPharmacopsychiatry23(Suppl. 3)108-113(1990) 5.HascoËt, M., and Bourin, M.Anticonflict effect of alpidem as compared with the benzodiazepine alprazolam in ratsPharmacol. Biochem. Behav.56(2)317-324(1997)

Caution: Product has not been fully validated for medical applications. For research use only.
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