Product Data Sheet

Product Name: Vanoxerine
Cat. No.: GC13322

Chemical Properties

Cas. No.	67469-69-6		
Chemical Name	1-[2-[bis(4-fluorophenyl)methoxy]ethyl]-4-(3-phenylpropyl)piperazine		
SMILES	C1CN(CCN1CCCC2=CC=CC=C2)CCOC(C3=CC=C(C=C3)F)C4=CC=C(C=C4)F		
Formula	$C_{28}H_{32}F_2N_2O$	M.Wt	450.56
Solubility	Soluble in DMSO	Storage	Store at -20°C
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	Vanoxerine		

Background

Vanoxerine is an antagonist of dopamine transporter (DAT1) with Ki value of 16.9nM [1].

As an antagonist of DAT, vanoxerine is developed for treatment of Parkinson's disease and depression but has no effect on these diseases. Vanoxerine is also found to have desirable cardiac antiarrhythmic properties. It is a blocker of cardiac hERG (hKv11.1) with IC50 value of 0.84nM. It also blocks the ICa,L and hNav1.5 channel with IC50 values of 320nM and 830nM, respectively. Vanoxerine does not significantly prolong Purkinje fiber APD60 and APD90 and has no significant effect on QT or TDR. Further, the clinical trial demonstrates that the effective concentrations of vanoxerine are well tolerated and safe in man [2].

References:
[1] Giros B, el Mestikawy S, Godinot N, Zheng K, Han H, Yang-Feng T, Caron MG. Cloning, pharmacological characterization, and chromosome assignment of the human dopamine transporter. Mol Pharmacol. 1992 Sep;42(3):383-90.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

[2] Lacerda AE, Kuryshev YA, Yan GX, Waldo AL, Brown AM. Vanoxerine: cellular mechanism of a new antiarrhythmic. J Cardiovasc Electrophysiol. 2010 Mar;21(3):301-10.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA