Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com

DATASHEET

GBR 12909 dihydrochloride

Product overview

Name	GBR 12909 dihydrochloride
Cat No	HB1812
Alternative names	Vanoxerine
Biological action	Inhibitor
Purity	>98%
Description	Potent, competitive dopamine uptake inhibitor

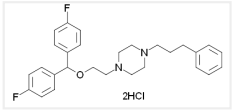
Biological Data

Biological description	Potent, competitive dopamine uptake inhibitor (K_i = 1 nM). Also a potent K_v11.1, and Na^+ and Ca^+ channel blocker (IC_{50} values are 0.8, 320 and 830 nM at hK_v11.1, $hI_{Ca,L}$ and hNa_v1.5 respectively and σ receptor blocker). Shows variety of biological actions. Active *in vivo*.

Solubility & Handling

Storage instructions	Room temperature (desiccate)
Solubility overview	Soluble in water (25 mM, gentle warming) and in DMSO (50 mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1-[2-[*Bis*-(4-fluorophenyl)methoxy]ethyl]-4-(3-phenylpropyl)piperazine dihydrochloride
Molecular Weight	523.49
Chemical structure	
Molecular Formula	$C_{28}H_{32}F_2N_2O.2HCl$
CAS Number	67469-78-7
PubChem identifier	104920
SMILES	C1CN(CCN1CCCC2=CC=CC=C2)CCOC(C3=CC=C(C=C3)F)C4=CC=C(C=C4)F.Cl.Cl
InChi	InChI=1S/C28H32F2N2O.2ClH/c29-26-12-8-24(9-13-26)28(25-10-14-27(30)15-11-25)33-22-21-32-19-17-31(18-20-32)16-4-7-23-5-2-1-3-6-23;;/h1-3,5-6,8-15,28H,4,7,16-22H2;2*1H
InChiKey	MIBSKSYCRFWIRU-UHFFFAOYSA-N
MDL number	MFCD00055193

References

The dopamine inhibitor GBR 12909: selectivity and molecular mechanism of action.

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Short-acting cocaine and long-acting GBR-12909 both elicit rapid dopamine uptake inhibition following intravenous delivery.

Espaã±a RA *et al* (2008) Neuroscience 155(1)
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Vanoxerine: cellular mechanism of a new antiarrhythmic.

Lacerda AE *et al* (2010) J Cardiovasc Electrophysiol 21(3)
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