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DATASHEET

Dofetilide

Product overview

Name	Dofetilide
Cat No	HB1078
Alternative names	Tikosyn, UK 68798
Biological action	Blocker
Purity	>99%
Description	Selective potassium channel blocker

Images



Biological Data

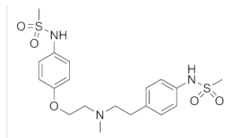
Biological description	Selective potassium channel blocker. Inhibits $K_v11.1$ (hERG) channels ($IC_{50} = 0.32 \mu M$) and rapid delayed-rectifier K^+ current (I_{Kr}). Increases the duration and refractory period of cardiac action potentials. Shows class III antiarrhythmic actions.
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Solubility & Handling

Solubility overview	Soluble in DMSO (100mM)
Storage instructions	Room temperature
Storage of solutions	Prepare and use solutions on the same day if possible. Store solutions at $-20^\circ C$ for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.
Shipping Conditions	Stable for ambient temperature shipping. Follow storage instructions on receipt.
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-(4-Methanesulphonamidophenoxy)-2-[N-(4-methanesulphonamidophenethyl)-N-methylamino]ethane
Molecular Weight	441.56
Chemical structure	



Molecular Formula	C ₁₉ H ₂₇ N ₃ O ₅ S ₂
CAS Number	115256-11-6
PubChem identifier	71329
SMILES	CN(CCC1=CC=C(C=C1)NS(=O)(=O)C)CCOC2=CC=C(C=C2)NS(=O)(=O)C
InChi	InChI=1S/C19H27N3O5S2/c1-22(13-12-16-4-6-17(7-5-16)20-28(2,23)24)14-15-27-19-10-8-18(9-11-19)21-29(3,25)26/h4-11,20-21H,12-15H2,1-3H3
InChiKey	IXTMWRCNAAVVAI-UHFFFAOYSA-N
MDL number	MFCD00869707

References

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Molecular determinants of inactivation and dofetilide block in ether a-go-go (EAG) channels and EAG-related K(+) channels.

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Saiz J *et al* (2011) IEEE Trans Biomed Eng 58(1)

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