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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

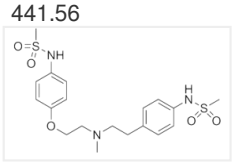
Biological Data

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

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in DMSO (100mM)
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	$C_{19}H_{27}N_3O_5S_2$

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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Saiz J *et al* (2011) IEEE Trans Biomed Eng 58(1)
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Voltage- and time-dependent block of the delayed K+ current in cardiac myocytes by dofetilide.

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