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DATASHEET

Verapamil hydrochloride

Product overview

Name	Verapamil hydrochloride
Cat No	HB1237
Biological action	Blocker
Purity	>99%
Description	L-type Ca^{2+} channel blocker

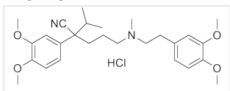
Biological Data

Biological description	L-type Ca^{2+} channel blocker and adrenergic antagonist. Shows various biological actions - increases FRZB expression and decreases Wnt/ β -catenin signalling in osteoarthritis and shows cardioprotective, vasodilator, anti-arrhythmic, anti-oxidative stress actions. Recently investigated as part of COVID-19 compound repurposing.
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Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in water (50mM)
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	α -[3-[[2-(3,4-Dimethoxyphenyl)ethyl]methylamino]propyl]-3,4-dimethoxy- α -(1-methylethyl) benzeneacetonitrile hydrochloride
Molecular Weight	491.07
Chemical structure	
Molecular Formula	$\text{C}_{27}\text{H}_{38}\text{N}_2\text{O}_4 \cdot \text{HCl}$
CAS Number	152-11-4
PubChem identifier	62969
SMILES	<chem>CC(C)C(CCCN(C)CCC1=CC(=C(C=C1)OC)OC)(C#N)C2=CC(=C(C=C2)OC)OC.Cl</chem>
InChi	InChI=1S/C27H38N2O4.ClH/c1-20(2)27(19-28,22-10-12-24(31-5)26(18-22)33-7)14-8-15-29(3)16-13-21-9-11-23(30-4)25(17-21)32-6;/h9-12,17-18,20H,8,13-16H2,1-7H3;1H
InChiKey	DOQPXTMNIUCOSY-UHFFFAOYSA-N
MDL number	MFCD00055208

References

Comparative study of the effect of verapamil and vitamin D on iron overload-induced oxidative stress and cardiac structural

changes in adult male rats.

Abd Allah ES *et al* (2014) Pathophysiology

PubMedID [25092628](#)

Verapamil protects against cartilage degradation in osteoarthritis by inhibiting Wnt/ β -catenin signaling.

Takamatsu A *et al* (2014) PLoS One 9(3)

PubMedID [24658359](#)

Robust anti-arrhythmic efficacy of verapamil and flunarizine against dofetilide-induced TdP arrhythmias is based upon a shared and a different mode of action.

Oros A *et al* (2010) Br J Pharmacol 161(1)

PubMedID [20718748](#)

A SARS-CoV-2 protein interaction map reveals targets for drug repurposing

Krogan et al (2020) Nature 7816

PubMedID [32353859](#)
