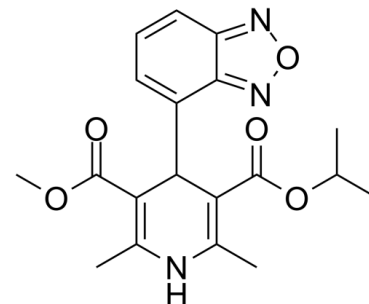


Data Sheet

Product Name:	Isradipine
Cat. No.:	CS-2201
CAS No.:	75695-93-1
Molecular Formula:	C ₁₉ H ₂₁ N ₃ O ₅
Molecular Weight:	371.39
Target:	Autophagy; Calcium Channel
Pathway:	Autophagy; Membrane Transporter/Ion Channel; Neuronal Signaling
Solubility:	DMSO : ≥ 100 mg/mL (269.26 mM)



BIOLOGICAL ACTIVITY:

Isradipine(Dynacirc) is a calcium channel blocker with an IC₅₀ of 34±8 μM. Target: Calcium Channel Isradipine(Dynacirc) is a calcium channel blocker with an IC₅₀ of 34±8 μM. It is usually prescribed for the treatment of high blood pressure in order to reduce the risk of stroke and heart attack[1]. Isradipine belongs to the dihydropyridine (DHP) class of calcium channel blockers (CCBs), the most widely used class of CCBs. It is structurally related to felodipine, nifedipine, and nimodipine and is the most potent calcium-channel blocking agent of the DHP class. Isradipine binds to calcium channels with high affinity and specificity and inhibits calcium flux into cardiac and arterial smooth muscle cells. It exhibits greater selectivity towards arterial smooth muscle cells owing to alternative splicing of the alpha-1 subunit of the channel and increased prevalence of inactive channels in smooth muscle cells. Isradipine may be used to treat mild to moderate essential hypertension [2].

References:

- [1]. Berjukow, S. and S. Hering, Voltage-dependent acceleration of Ca(v)1.2 channel current decay by (+)- and (-)-isradipine. Br J Pharmacol, 2001. 133(7): p. 959-66.
- [2]. Tran, P.H., et al., Physical properties and in vivo bioavailability in human volunteers of isradipine using controlled release matrix tablet containing self-emulsifying solid dispersion. Int J Pharm, 2013. 450(1-2): p. 79-86.

CAIndexNames:

3,5-Pyridinedicarboxylic acid, 4-(2,1,3-benzoxadiazol-4-yl)-1,4-dihydro-2,6-dimethyl-, 3-methyl 5-(1-methylethyl) ester

SMILES:

O=C(C1=C(C)NC(C)=C(C(OC(C)C)=O)C1C2=CC=CC3=NON=C23)OC

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA