
Product Data Sheet

Product Name: Barnidipine

Cat. No.: GC35469

Chemical Properties

Cas. No. 104713-75-9

SMILES O=C(C1=C(C)NC(C)=C(C(O[C@@H]2CN(CC3=CC=CC=C3)CC2)=O)[C@H]1C4=CC=CC([N+])([O-])=O)=C4)OCFormula C₂₇H₂₉N₃O₆ M.Wt 491.54

Solubility DMSO : 98mg/mL Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Barnidipine is a dihydropyridine calcium channel blocker that has an IC₅₀ value of 0.35 nM in potassium-induced tonic contraction of pig coronary artery.¹ It demonstrates antihypertensive activity by reducing peripheral vascular resistance. It decreases blood pressure in spontaneously hypertensive rats when administered orally at 1 and 3 mg/kg per day.² Formulations containing barnidipine have been used as a treatment for hypertension.

1. Nakayama, K., Kashiwabara, T., Yamada, S., et al. Assessment in pig coronary artery of long-lasting and potent calcium antagonistic actions of the novel dihydropyridine derivative mepirodipine hydrochloride *Arzneimittelforschung* 39(1)50-55(1989)

2. Kawashima, K., Toda, H., Oohata, H., et al. Antihypertensive and diuretic effects of YM-09730-5, a new calcium antagonist, in stroke-prone spontaneously hypertensive rats *Gen. Pharmacol.* 22(2)263-266(1991)

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA