

Elgodipine

Chemical Properties

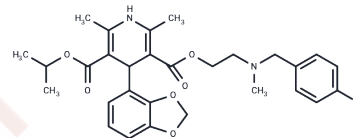
CAS No. : 119413-55-7

Formula: C₂₉H₃₃FN₂O₆

Molecular Weight: 524.58

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

| | |
|---------------|---|
| Description | Elgodipine significantly reduced the incidence and severity of exercise-induced angina pectoris systemically and was able to inhibit vascular smooth muscle proliferation through a mechanism independent of the expression of the transcription factors c-fos and c-jun. The Elgodipine-induced inhibition was voltage-dependent. Elgodipine is a potential compound for the treatment of angina pectoris. |
| Targets(IC50) | Others, Calcium Channel |
| In vivo | Elgodipine (64 micrograms/kg; i.v.; 22 patients) significantly decreased systemic vascular resistance as well as systolic and diastolic blood pressure, while increasing cardiac output and stroke volume. Heart rate was not affected by elgodipine, either at rest or during exercise.[1] |

Solubility Information

| | |
|------------|---|
| Solubility | DMSO: 55 mg/mL (104.85 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 1.9063 mL | 9.5314 mL | 19.0629 mL |
| 5 mM | 0.3813 mL | 1.9063 mL | 3.8126 mL |
| 10 mM | 0.1906 mL | 0.9531 mL | 1.9063 mL |
| 50 mM | 0.0381 mL | 0.1906 mL | 0.3813 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Tamargo J, et al. Cardiovascular effects of the new dihydropyridine derivative elgodipine. *Arzneimittelforschung*. 1991;41(9):895-900.
- Silke B, et al. Hemodynamic effects of intravenous elgodipine in coronary artery disease during rest and exercise, and basic pharmacokinetic parameters. *Cardiovasc Drugs Ther*. 1996;10(5):573-580.
- Valdivielso JM, et al. Cardiovascular effects of elgodipine and nifedipine compared in anaesthetized rats. *Eur J Pharmacol*. 1997;335(2-3):193-198.
- García-Barrado MJ, et al. Effects of verapamil and elgodipine on isoprenaline-induced metabolic responses in rabbits. *Eur J Pharmacol*. 2001;415(1):105-115.
- Chulia T, et al. Comparative study of elgodipine and nisoldipine on the contractile responses of various isolated blood vessels. *Eur J Pharmacol*. 1995;285(2):115-122.
- Galán L, et al. Characteristics of Ca²⁺ channel blockade by oxodipine and elgodipine in rat cardiomyocytes. *Eur J Pharmacol*. 1998;357(1):93-105.

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