Product Data Sheet

Product Name: Darodipine (PY 108-068)
Cat. No.: GC31301

Chemical Properties

Cas. No.	72803-02-2		
SMILES	O=C(C1=C(C)NC(C)=C(C(OCC)=O)C1C2=CC=CC3=NON=C32)OCC		
Formula	$C_{19}H_{21}N_3O_5$	M.Wt	371.39
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Darodipine (PY 108-068)		

Protocol

Animal experiment:

Rats: Male Wistar rats are used. Twelve-month-old rats are left untreated and used as adult reference animals. Twenty-one-month-old rats are allotted randomly to two groups of 8 animals each. Rats of the first group receive an oral daily dose of 5 mg/kg of darodipine in drinking water. The animals of the second group are left untreated and served as a control group. Rats of these two groups are allowed to survive for 6 months, until 27 months of age (old rats). Darodipine-treated rats have water consumption determined every second day and body weight determined weekly[1].

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

References:

[1]. Amenta F, et al. Effect of long-term treatment with the dihydropyridine-type calcium channel blocker darodipine(PY 108-068) on the cerebral capillary network in aged rats. Mech Ageing Dev. 1995 Jan 31;78(1):27-37.
[2]. Vega JA, et al. Effect of treatment with the dihydropyridine-type calcium antagonist darodipine (PY 108-068) on the expression of neurofilament protein immunoreactivity in the cerebellar cortex of aged rats. Mech Ageing Dev. 1994 Aug;75(2):169-77.

Background

Darodipine (PY 108-068, PY-108068) is a potent calcium channel antagonist.

Treatment with darodipine increases the number and the average length of alkaline phosphatase-reactive capillaries and reduces the intercapillary distance and the diameter of cerebral capillaries in old rats. The pericapillary microrenvironment of the Ammon's horn is the most sensitive to treatment with darodipine[1]. Darodipine may reduce neuronal cytoskeletal changes occurring in aging and in neurodegenerative disorders. A 6-month treatment (from the 18th to the 24th month of life) with an oral daily dose of 10 mg/kg of darodipine restores in part the expression of 200 kDa-NF subunit immunoreactivity in the cerebellar cortex[2].

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

[1]. Amenta F, et al. Effect of long-term treatment with the dihydropyridine-type calcium channel blocker darodipine(PY 108-068) on the cerebral capillary network in aged rats. Mech Ageing Dev. 1995 Jan 31;78(1):27-37. [2]. Vega JA, et al. Effect of treatment with the dihydropyridine-type calcium antagonist darodipine (PY 108-068) on the expression of neurofilament protein immunoreactivity in the cerebellar cortex of aged rats. Mech Ageing Dev. 1994 Aug;75(2):169-77.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA