
Product Data Sheet

Product Name: Ipramidil (C80-1324)

Cat. No.: GC32496

Chemical Properties

Cas. No. 83656-38-6

SMILES O=C(C1=[N+])([O-])ON=C1C(NC(C)C)=O)NC(C)CFormula $C_{10}H_{16}N_4O_4$ M.Wt 256.26

Solubility Soluble in DMSO 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**

Ipramidil (C80-1324) is a furoxan compound. Ipramidil (C80-1324) reveals marked dilator activity in the coronary circulation of isolated working hearts.

The vasodilator action of Ipramidil (C80-1324) on coronary vessels is more potent than that of GTN and appears to be biphasic. The increase in coronary flow caused by furoxans as well as by glyceryl trinitrate (GTN) is blunted upon coinfusion of the guanylate cyclase inhibitor methylene blue. NO sign of tachyphylaxis of the vasodilator response is seen upon the repeated or continuous (60 min) application of Ipramidil at a concentration of 1 µg/mL, which induces an increase in coronary flow of $67 \pm 9\%$ (N=5). Moreover, the vasodilator effect of Ipramidil is not different from control when Ipramidil is given after a 60 min preinfusion of 10 µg/mL GTN, i.e. under conditions of nitrate tolerance (P=0.493, N=3). However, when GTN is applied after a 30 min infusion of Ipramidil, its dilator response is significantly diminished (P=0.006, N=3). Unlike GTN, Ipramidil concentration independently increases the spontaneous beating rate of the hearts by 10-30 beats per minute and appeared to have a weak positive inotropic effect[1].

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

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[1]. Feelisch M, et al. Thiol-mediated generation of nitric oxide accounts for the vasodilator action of furoxans. *Biochem Pharmacol.* 1992 Sep 25;44(6):1149-57.

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