Ipramidil

Cat. No.: HY-U00172 CAS No.: 83656-38-6 Molecular Formula: $C_{10}H_{16}N_{4}O_{4}$ Molecular Weight: 256.26 Others Target: Pathway: Others

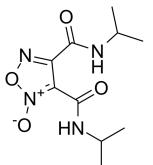
Powder Storage:

3 years 2 years

In solvent -80°C 6 months

-20°C

-20°C 1 month



Product Data Sheet

BIOLOGICAL ACTIVITY

Description

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

In Vitro

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±9% (N=5). Moreover, the vasodilatoreffect 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].

REFERENCES

[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.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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

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