

Data Sheet

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Product Name : Zaprinast
Cat. No. : PC-70272
CAS No. : 37762-06-4
Molecular Formula : C₁₃H₁₃N₅O₂
Molecular Weight : 271.3

Target : Phosphodiesterase (PDE)

Solubility : 10 mM in DMSO



Biological Activity

Zaprinast (M&B 22948) is a potent, cGMP-specific phosphodiesterase inhibitor with IC50 of 0.5-0.76 and 0.15 uM for **PDE5** and **PDE6** respectively, also is an agonist for **GPR35** (EC50=16/840 nM for rat/human GPR35).

Zaprinast weakly inhibits PDE9, PDE10, and PDE11 with IC50 of 10-30 uM.

Zaprinast enhances the vasodilatory effects of nitric oxide in a range of vascular tissues by prolonging the cGMP-mediated activation of cGMP-dependent protein kinase.

Zaprinast also reduces cellular 2HG levels by inhibiting the upstream enzyme glutaminase (GLS), reverses histone hypermethylation and soft-agar growth of IDH1-mutant cells.

References

Elhammali A, et al. *Cancer Discov.* 2014 Jul;4(7):828-39.

Taniguchi Y, et al. *FEBS Lett.* 2006 Sep 18;580(21):5003-8.

Frossard N, et al. *Br J Pharmacol*. 1981 Aug;73(4):933-8.

Griffith TM, et al. *Eur J Pharmacol*. 1985 Jun 7;112(2):195-202.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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