

Zaprinast

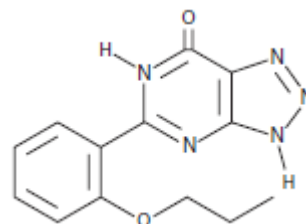
Catalog #: 27218

Lot #: 120608

Size: 10 mg

Structure:

CAS Registry #: 37762-06-4



Purity: ≥98%

Chemical Formula: C₁₃H₁₃N₅O₂

Molecular Weight: 271.3

Description: Zaprinast is a cGMP-specific PDE inhibitor which moderately inhibits PDE5 and PDE6. It weakly inhibits PDE9, PDE10 and PDE11. Sildenafil (Viagra™) was developed from Zaprinast, which enhances the vasodilatory effects of nitric oxide in a range of vascular tissues by prolonging the cGMP-mediated activation of cGMP-dependent protein kinase. Also, GPR35 is activated by Zaprinast.

Appearance: A crystalline solid

Solubility: Soluble in DMSO and DMF, purged with an inert gas. Solubility in DMSO and DMF is ~10 mg/ml. For maximum solubility, dissolve in DMF and then dilute with the aqueous buffer of choice. Do not store aqueous solutions for more than one day.

Biological Activity: Zaprinast inhibits PDE5 and PDE6 with IC₅₀ values of 0.5-0.76 μM and 0.15 μM, respectively.

Storage/Stability: Store at or below -20°C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

References:

1. Nakamizo, T., *et al.*, *J. Neurosci. Res.* 2003;**71**:485-495.
2. Gibson, A., *et al.*, *Eur. J. Pharmacol.* 2001;**411**:1-10.
3. Taniguchi, Y., *et al.*, *FEBS Lett.* 2006;**580**:5003-5008.