Pyridoxal isonicotinoyl hydrazone

Cat. No.: HY-114758

CAS No.: 737-86-0

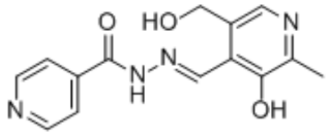
Molecular Formula: $C_{14}H_{14}N_4O_3$

Molecular Weight: 286.29

Target: Others

Pathway: Others

Storage: 4°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 14.71 mg/mL (51.38 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.4930 mL	17.4648 mL	34.9296 mL
	5 mM	0.6986 mL	3.4930 mL	6.9859 mL
	10 mM	0.3493 mL	1.7465 mL	3.4930 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
   Solubility: ≥ 1.47 mg/mL (5.13 mM); Clear solution
2. Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
   Solubility: ≥ 1.47 mg/mL (5.13 mM); Clear solution
3. Add each solvent one by one: **10% DMSO >> 90% corn oil**
   Solubility: 1.47 mg/mL (5.13 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Pyridoxal isonicotinoyl hydrazone (PIH) is a lipophilic, tridentate Fe-chelating agent that shows high Fe chelation efficacy[1].

REFERENCES

[1]. Hermes-Lima M, et al. The iron chelator pyridoxal isonicotinoyl hydrazone (PIH) and its analogues prevent damage to 2-deoxyribose mediated by ferric iron plus ascorbate. Biochim Biophys Acta. 2000 Oct 18;1523(2-3):154-60.

[2]. Landschulz W, et al. A lipophilic iron chelator can replace transferrin as a stimulator of cell proliferation and differentiation. J Cell Biol. 1984 Feb;98(2):596-601.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA