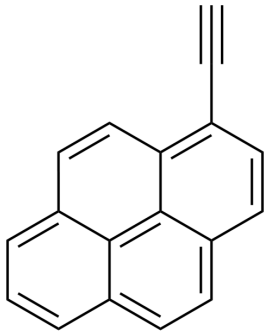
1-Ethynylpyrene



Cat. No.:	HY-131452
CAS No.:	34993-56-1
Molecular Formula:	$C_{18}H_{10}$
Molecular Weight:	226.27
Target:	Cytochrome P450
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO : 9.09 mg/mL (40.17 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.4195 mL	22.0975 mL	44.1950 mL
	5 mM	0.8839 mL	4.4195 mL	8.8390 mL
	10 mM	0.4419 mL	2.2097 mL	4.4195 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: ≥ 0.91 mg/mL (4.02 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 0.91 mg/mL (4.02 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

1-Ethynylpyrene is an aryl acetylenic inhibitor of cytochromes P450 1A1, 1A2, and 2B1 with IC_{50}s of 0.18, 0.32, and 0.04 μM, respectively[1]. 1-Ethynylpyrene is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.

In Vitro

1-Ethynylpyrene exhibits activity against P450 1A2, and 2B1 with K_is of 0.32 and 0.04 μM, respectively[1].

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

REFERENCES

[1]. Naijue Zhu, et al. Ethynyl and Propynylpyrene Inhibitors of Cytochrome P450. J Chem Crystallogr. 2010 Apr 1;40(4):343-352.

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