Product Data Sheet

3-(3,4-Dimethoxyphenyl)propanoic acid

Cat. No.: HY-Y1620

CAS No.: 2107-70-2

Molecular Formula: C₁₁H₁₄O₄

Molecular Weight: 210.23

Target: Others

Pathway: Others

Storage: Powder -20°C 3 years

4°C 2 years

In solvent -80°C 2 years

-20°C 1 year

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (475.67 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.7567 mL	23.7835 mL	47.5670 mL
	5 mM	0.9513 mL	4.7567 mL	9.5134 mL
	10 mM	0.4757 mL	2.3783 mL	4.7567 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: ≥ 2.5 mg/mL (11.89 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (11.89 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (11.89 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	3-(3,4-Dimethoxyphenyl)propanoic acid is an orally active short-chain fatty acids (SCFAs). 3-(3,4-Dimethoxyphenyl)propanoic acid stimulates γ globin gene expression, erythropoiesis in vivo and is used for the β hemoglobinopathies and other anemias ^[1] .
In Vivo	3-(3,4-Dimethoxyphenyl)propanoic acid (50, 150 mg/kg of iv or 50, 150, 200 mg/kg of orally) achieves concentrations significantly higher than targeted plasma levels for several hours after single 50 to 150 mg/kg doses ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES						
[1]. Pace BS, et al. Short-chain fatty acid derivatives induce fetal globin expression and erythropoiesis in vivo. lood. 2002 Dec 15;100(13):4640-8.						
			edical applications. For research			
	Tel: 609-228-6898 Address:	Fax: 609-228-5909 1 Deer Park Dr, Suite Q, Monm	E-mail: tech@MedChemExprouth Junction, NJ 08852, USA	ess.com		

Page 2 of 2 www.MedChemExpress.com