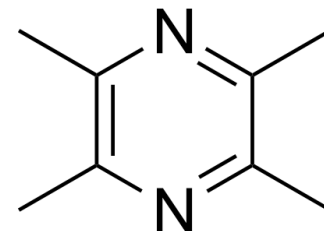


Tetramethylpyrazine

Cat. No.:	HY-N0264		
CAS No.:	1124-11-4		
Molecular Formula:	C ₈ H ₁₂ N ₂		
Molecular Weight:	136.19		
Target:	Others		
Pathway:	Others		
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 : 50 mg/mL (367.13 mM); Need ultrasonic

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		7.3427 mL	36.7134 mL	73.4268 mL
5 mM		1.4685 mL	7.3427 mL	14.6854 mL	
10 mM		0.7343 mL	3.6713 mL	7.3427 mL	

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

In Vivo

- Add each solvent one by one: **10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline**
Solubility: ≥ 2.5 mg/mL (18.36 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: ≥ 2.5 mg/mL (18.36 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**
Solubility: ≥ 2.5 mg/mL (18.36 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Tetramethylpyrazine (Ligustrazine), an alkyipyrazine isolated from *Ligusticum wallichii* (Chuan Xiong)^[1], is present in french fries, bread, cooked meats, tea, cocoa, coffee, beer, spirits, peanuts, filberts, dairy products and soy products as fragrance and flavouring ingrediensexhibits. Tetramethylpyrazine (Ligustrazine) also has potential nootropic and anti-inflammatory activities in rats^{[2][3]}.

In Vitro

Tetramethylpyrazine has been extensively used in China for cardiovascular and cerebrovascular diseases for about 40

years. Because of its effectiveness in multisystem, especially in cardiovascular. Tetramethylpyrazine also has been used in various diseases, such as coronary heart disease, diabetes, cancers, and liver injury^[1].

REFERENCES

- [1]. Zhao Y, et al. Mechanisms and Clinical Application of Tetramethylpyrazine (an Interesting Natural Compound Isolated from Ligusticum Wallichii): Current Status and Perspective. *Oxid Med Cell Longev*. 2016;2016:2124638.
- [2]. Wu W, et al. Tetramethylpyrazine protects against scopolamine-induced memory impairments in rats by reversing the cAMP/PKA/CREB pathway. *Behav Brain Res*. 2013 Sep 15;253:212-6.
- [3]. Kao TK, et al. Tetramethylpyrazine reduces cellular inflammatory response following permanent focal cerebral ischemia in rats. *Exp Neurol*. 2013 Sep;247:188-201.
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Caution: Product has not been fully validated for medical applications. For research use only.

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