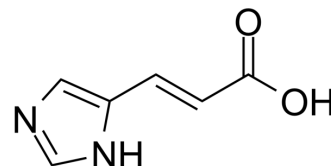


## Urocanic acid

<b>Cat. No.:</b>	HY-113008		
<b>CAS No.:</b>	104-98-3		
<b>Molecular Formula:</b>	C <sub>6</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	138.12		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	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 (362.00 mM; Need ultrasonic)  
 H<sub>2</sub>O : 2 mg/mL (14.48 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	7.2401 mL	36.2004 mL	72.4008 mL
	5 mM	1.4480 mL	7.2401 mL	14.4802 mL
	10 mM	0.7240 mL	3.6200 mL	7.2401 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: ≥ 2.08 mg/mL (15.06 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (15.06 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (15.06 mM); Clear solution
- Add each solvent one by one: PBS  
Solubility: 2 mg/mL (14.48 mM); Clear solution; Need ultrasonic and warming and heat to 60°C

### BIOLOGICAL ACTIVITY

#### Description

Urocanic acid, produced in the upper layers of mammalian skin, is a major absorber of ultraviolet radiation (UVR).

#### IC<sub>50</sub> & Target

Human Endogenous Metabolite

---

#### In Vitro

Urocanic acid (UCA) is formed in the upper layers of the epidermis where filaggrin, a histidine-rich filamentous protein produced after caspase-14 cleavage of profilaggrin, is broken down by proteinases into component amino acids<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

#### CUSTOMER VALIDATION

- Research Square Preprint. 2021 Aug.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

#### REFERENCES

[1]. Gibbs NK, et al. Recent advances in urocanic acid photochemistry, photobiology and photoimmunology. Photochem Photobiol Sci. 2008 Jun;7(6):655-67.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA