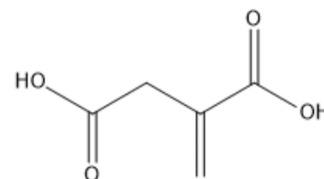


Itaconic acid

Cat. No.:	HY-Y0520
CAS No.:	97-65-4
Molecular Formula:	C ₅ H ₆ O ₄
Molecular Weight:	130.1
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 27.78 mg/mL (213.53 mM; Need ultrasonic)				
		Solvent	Mass		
	Preparing Stock Solutions	Concentration	1 mg	5 mg	10 mg
		1 mM	7.6864 mL	38.4320 mL	76.8639 mL
		5 mM	1.5373 mL	7.6864 mL	15.3728 mL
10 mM		0.7686 mL	3.8432 mL	7.6864 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 25 mg/mL (192.16 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	Itaconic acid, a precursor of polymers, chemicals, and fuels, can be synthesized by many fungi. Itaconic acid also is a macrophage-specific metabolite. Itaconic acid mediates crosstalk between macrophage metabolism and peritoneal tumors [1][2].	
IC₅₀ & Target	Human Endogenous Metabolite	Human Endogenous Metabolite

REFERENCES

- [1]. Weiss JM, et, al. Itaconic acid mediates crosstalk between macrophage metabolism and peritoneal tumors. J Clin Invest. 2018 Aug 31;128(9):3794-3805.
- [2]. Zhao M, et, al. Itaconic acid production in microorganisms. Biotechnol Lett. 2018 Mar;40(3):455-464.

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

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