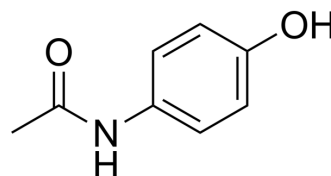


## Acetaminophen (Standard)

<b>Cat. No.:</b>	HY-66005R
<b>CAS No.:</b>	103-90-2
<b>Molecular Formula:</b>	C <sub>8</sub> H <sub>9</sub> NO <sub>2</sub>
<b>Molecular Weight:</b>	151.16
<b>Target:</b>	COX; Endogenous Metabolite; Histone Acetyltransferase; Bacterial; Parasite
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; Epigenetics; Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 250 mg/mL (1653.88 mM; Need ultrasonic)  
 H<sub>2</sub>O : 10 mg/mL (66.16 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		6.6155 mL	33.0775 mL	66.1551 mL
	5 mM		1.3231 mL	6.6155 mL	13.2310 mL
	10 mM		0.6616 mL	3.3078 mL	6.6155 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Acetaminophen (Standard) is the analytical standard of Acetaminophen. This product is intended for research and analytical applications. Acetaminophen (Paracetamol) is a selective cyclooxygenase-2 (COX-2) inhibitor with an IC<sub>50</sub> of 25.8 μM; is a widely used antipyretic and analgesic agent<sup>[1][2][3]</sup>. Acetaminophen is a potent hepatic N-acetyltransferase 2 (NAT2) inhibitor<sup>[4]</sup>.

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

COX-1

COX-2

### CUSTOMER VALIDATION

- Cell. 2023 Dec 7;186(25):5500-5516.e21.
- Nat Commun. 2021 Sep 20;12(1):5548.
- Nat Commun. 2021 Aug 26;12(1):5131.

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- Nat Commun. 2021 May 17;12(1):2863.
  - Theranostics. 2017 Sep 26;7(17):4135-4148.

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

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

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