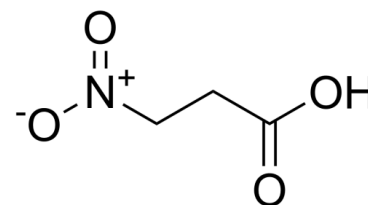


## Data Sheet

<b>Product Name:</b>	3-Nitropropanoic acid
<b>Cat. No.:</b>	CS-W013591
<b>CAS No.:</b>	504-88-1
<b>Molecular Formula:</b>	C <sub>3</sub> H <sub>5</sub> NO <sub>4</sub>
<b>Molecular Weight:</b>	119.08
<b>Target:</b>	Apoptosis; Bacterial
<b>Pathway:</b>	Anti-infection; Apoptosis
<b>Solubility:</b>	DMSO : 125 mg/mL (1049.71 mM; Need ultrasonic); H <sub>2</sub> O : 100 mg/mL (839.77 mM; Need ultrasonic)



### BIOLOGICAL ACTIVITY:

3-Nitropropanoic acid ( $\beta$ -Nitropropionic acid) is an irreversible inhibitor of **succinate dehydrogenase**. 3-Nitropropanoic acid exhibits potent antimycobacterial activity with a MIC value of 3.3  $\mu$ M<sup>[1][2]</sup>. IC<sub>50</sub> & Target: succinate dehydrogenase<sup>[1]</sup>

### References:

[1]. Huang LS, et al. 3-nitropropionic acid is a suicide inhibitor of mitochondrial respiration that, upon oxidation by complex II, forms a covalent adduct with a catalytic base arginine in the active site of the enzyme. J Biol Chem. 2006 Mar 3;281(9):5965-72.

[2]. Chomcheon P, et al. 3-Nitropropionic acid (3-NPA), a potent antimycobacterial agent from endophytic fungi: is 3-NPA in some plants produced by endophytes? J Nat Prod. 2005 Jul;68(7):1103-5.

### CAIndexNames:

Propanoic acid, 3-nitro-

### SMILES:

O=C(O)CC[N+]([O-])=O

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

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

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