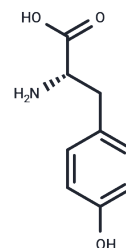


## L-Tyrosine

## Chemical Properties

CAS No. :	60-18-4
Formula:	C <sub>9</sub> H <sub>11</sub> NO <sub>3</sub>
Molecular Weight:	181.19
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	L-Tyrosine ((S)-Tyrosine) is a naturally occurring tyrosine and is synthesized in vivo from L-phenylalanine, considered a non-essential amino acid. L-Tyrosine(L-p-Tyrosine) is the levorotatory isomer of the aromatic amino acid tyrosine.
Targets(IC50)	Amino Acids and Derivatives,Endogenous Metabolite
In vitro	L-tyrosine in vitro inhibits citrate synthase activity in the posterior cortex. Succinate dehydrogenase activity is increased in the posterior cortex, hippocampus, striatum and liver. Complex I activity is inhibited in the hippocampus, complex II activity is also inhibited in the hippocampus and in the posterior cortex and liver, complex II-III activity is not altered by L-tyrosine and complex IV activity decreased in the posterior cortex[1].
In vivo	Acute administration of L-tyrosine inhibits malate dehydrogenase and complex II, II-III and IV of the mitochondrial respiratory chain activity in the posterior cortex and liver of rats. The succinate dehydrogenase enzyme and complex I activity are inhibited in the posterior cortex and increased in the striatum[1].

## Solubility Information

Solubility	0.1 M HCl: 10 mg/mL (55.19 mM),Sonication is recommended. DMSO: Insoluble, H <sub>2</sub> O: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## A DRUG SCREENING EXPERT

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.5191 mL	27.5953 mL	55.1907 mL
5 mM	1.1038 mL	5.5191 mL	11.0381 mL
10 mM	0.5519 mL	2.7595 mL	5.5191 mL
50 mM	0.1104 mL	0.5519 mL	1.1038 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

### Reference

Ferreira GK, et al. Neurotox Res. 2013, 23(4):327-35.

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**This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use**

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