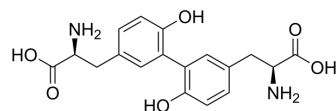


## L,L-Dityrosine

Cat. No.:	HY-101552A
CAS No.:	63442-81-9
Molecular Formula:	C <sub>18</sub> H <sub>20</sub> N <sub>2</sub> O <sub>6</sub>
Molecular Weight:	360.36
Target:	Amino Acid Derivatives
Pathway:	Others
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 5.56 mg/mL (15.43 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.7750 mL	13.8750 mL	27.7500 mL
	5 mM	0.5550 mL	2.7750 mL	5.5500 mL
	10 mM	0.2775 mL	1.3875 mL	2.7750 mL

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

### BIOLOGICAL ACTIVITY

#### Description

L,L-Dityrosine (o,o'-Dityrosine) is a constituent of acid hydrolysates of a number of biological materials, including the insect cuticular resilin<sup>[1]</sup>.

#### In Vivo

L,L-Dityrosine (o,o'-Dityrosine) is elevated in ventral midbrain and striatum of MPTP-treated mice<sup>[2]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Toxics. 2022, 10(9), 509.

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

### REFERENCES

---

[1]. Kungl AJ, et al. Molecular dynamics simulation of the rare amino acid LL-dityrosine and a dityrosine-containing peptide: comparison with time-resolved fluorescence. *Biochim Biophys Acta*. 1994 Dec 15;1201(3):345-52.

[2]. S Pennathur, et al. Mass spectrometric quantification of 3-nitrotyrosine, ortho-tyrosine, and o,o'-dityrosine in brain tissue of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-treated mice, a model of oxidative stress in Parkinson's disease. *J Biol Chem*. 1999 Dec 3;274(49):34621-8.

---

**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