
Product Data Sheet

Product Name: L,L-Dityrosine hydrochloride

Cat. No.: GC36415

Chemical Properties

Cas. No. 221308-01-6

SMILES O=C(O)[C@@H](N)CC1=CC(C2=C(O)C=CC(C[C@H](N)C(O)=O)=C2)=C(O)C=C1.Cl.Cl

Formula C₁₈H₂₂Cl₂N₂O₆

M.Wt 433.28

Solubility H₂O : 125 mg/mL (288.50 mM; Need ultrasonic); DMSO : Store
62.5 mg/mL (144.25 mM; ultrasonic and warming and heat Storage at -
to 60°C) 20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

L,L-Dityrosine is an amino acid conjugate containing two L-tyrosine molecules. L-Tyrosine residues in fibrinogen proteins can form L,L-dityrosine cross-links between fibrinogen proteins in the presence of hematin and plasma-generated hydrogen peroxide under non-thermal plasma exposure.¹ L-Tyrosine residues in human, but not mouse, amylin peptides can form L,L-dityrosine cross-links between amylin peptides in the presence of copper (II) ions and hydrogen peroxide.²

1.Ke, Z., and Huang, Q. Haem-assisted dityrosine-cross-linking of fibrinogen under non-thermal plasma exposure: One important mechanism of facilitated blood coagulation. *Sci. Rep.* 6:26982(2016)
2. Dong, X., Svantesson, T., Sholts, S.B., et al. Copper ions induce dityrosine-linked dimers in human but not in murine islet amyloid polypeptide (IAPP/amylin). *Biochem. Biophys. Res. Commun.* 510(4):520-524(2019)

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

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