



LKT Laboratories, Inc.

1,4-DPCA

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lktlabs.com
Web: lktlabs.com

Product Information

Product ID D6108

CAS No. 331830-20-7

Chemical Name 4,4alpha-dihydro-4-oxo-1,10-phenanthroline-3-carboxylic acid

Synonym 1,4-Dihydrophenanthroline-4-one-3-carboxylic acid, 3-Acetyl-1H-[1,10]phenanthroline-4-one

Formula C₁₃H₈N₂O₃

Formula Wt. 240.22

Melting Point

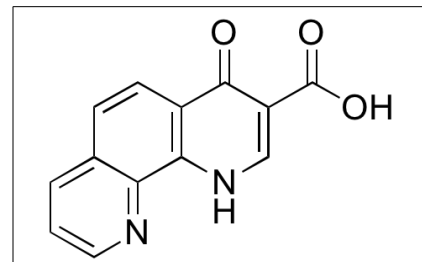
Purity ≥98%

Solubility Soluble in: DMSO (2.5 mg/mL, warm); ethanol (5 mg/mL, warm); DMF (5 mg/mL)

Store Temp -20° C

Ship Temp Ambient

Description 1,4-DPCA is an inhibitor of prolyl hydroxylase that stabilizes expression of HIF-1α and exhibits anticancer and pro-angiogenic activities. In breast cancer cells, 1,4-DPCA inhibits cell proliferation and decreases deposition of collagens I and IV. This compound also limits growth of connective tissue on biomaterials and implanted medical devices.



Bulk quantities available upon request

Product ID	Size
D6108	5 mg
D6108	25 mg

References Zhang Y, Strehin I, Bedelbaeva K, et al. Drug-induced regeneration in adult mice. *Sci Transl Med.* 2015 Jun 3;7(290):290ra92. PMID: 26041709.

Xiong G, Deng L, Zhu J, et al. Prolyl-4-hydroxylase α subunit 2 promotes breast cancer progression and metastasis by regulating collagen deposition. *BMC Cancer.* 2014 Jan 2;14:1. PMID: 24383403.

Love RJ, Jones KS. Transient inhibition of connective tissue infiltration and collagen deposition into porous poly(lactic-co-glycolic acid) discs. *J Biomed Mater Res A.* 2013 Dec;101(12):3599-606. PMID: 23766241.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.