LKT Laboratories, Inc.

1,4-DPCA

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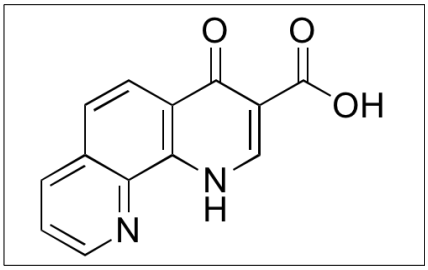
Product Information

Product ID D6108
CAS No. 331830-20-7
Chemical Name 4,4alpha-dihydro-4-oxo-1,10-phenanthroline-3-carboxylic acid

Synonym 1,4-Dihydrophenonthrolin-4-one-3-carboxylic acid, 3-Acetyl-1H-[1,10] phenanthrolin-4-one

Formula $C_{13}H_8N_2O_3$
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)



Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
D6108	5 mg	$54.60
D6108	25 mg	$223.20

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.

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.