Certificate of Analysis

Product Name: **Lavendustin A** **Catalog No.: 1331** **Batch No.: 3**

CAS Number: 125697-92-9

IUPAC Name: 5-[[(2,5-Dihydroxyphenyl)methyl][(2-hydroxyphenyl)methyl]amino]-2-hydroxybenzoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{21}H_{19}NO_6$

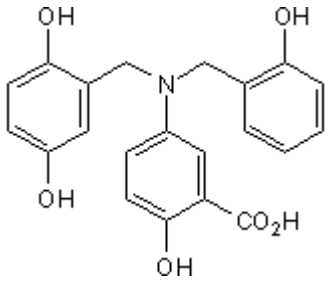
Batch Molecular Weight: 381.38

Physical Appearance: White lyophilised film

Solubility: ethanol to 25 mM
DMSO to 25 mM

Storage: Desiccate at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.29 (Dichloromethane:Ethyl acetate:TFA [95:5:0.3])

HPLC: Shows >99.2% purity

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Potent, cell-permeable inhibitor of epidermal growth factor receptor (EGFR) tyrosine kinase (IC_{50} = 11 nM). Inhibits $p60^{c\text{-}src}$ with an IC_{50} of 500 nM and is selective over PKA, PKC and PI 3-kinase (IC_{50} > 100 µM).

Physical and Chemical Properties:

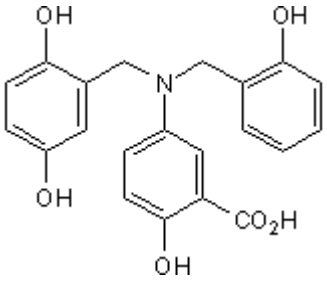
Batch Molecular Formula: $C_{21}H_{19}NO_6$

Batch Molecular Weight: 381.38

Physical Appearance: White lyophilised film

Minimum Purity: >98%

Batch Molecular Structure:



Storage: Desiccate at -20°C

Solubility & Usage Info:

ethanol to 25 mM
DMSO to 25 mM

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Onoda *et al* (1989) Isolation of a novel tyrosine kinase inhibitor, lavendustin A, from *Streptomyces griseolavendus*. J.Nat.Prod. ***52*** 1252. PMID: 2614420.

Hsu *et al* (1991) Kinetic analysis of the inhibition of the epidermal growth factor receptor tyrosine kinase by lavendustin-A and its analogue. J.Biol.Chem. ***266*** 21105. PMID: 1939153.

O'Dell *et al* (1991) Long-term potentiation in the hippocampus is blocked by tyrosine kinase inhibitors. Nature ***353*** 558. PMID: 1656271.

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