PRODUCT INFORMATION

Lavendustin A
Item No. 10010268

CAS Registry No.: 125697-92-9
Formal Name: 5-[(2,5-dihydroxyphenyl)methyl] - [2-hydroxyphenyl][methyl]amino] - 2-hydroxy-benzoic acid
Synonyms: NSC 678027, RG-14355
MF: C_{21}H_{19}NO_{6}
FW: 381.4
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Lavendustin A is supplied as a crystalline solid. A stock solution may be made by dissolving the lavendustin A in the solvent of choice, which should be purged with an inert gas. Lavendustin A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of lavendustin A in these solvents is approximately 10, 15, and 20 mg/ml, respectively.

Lavendustin A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, lavendustin A should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Lavendustin A has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Lavendustin A is a selective inhibitor of epidermal growth factor (EGF) receptor-associated tyrosine kinase (IC_{50} = 11 nM) that was first isolated from a Streptomyces culture filtrate. It does not inhibit protein kinase A (PKA), PKC, or PI3K (IC_{50} > 100 µM). It has been used to differentiate rat mesenchymal stem cells, to inhibit NMDA-stimulated cGMP production, and to inhibit VEGF-induced angiogenesis.

References