Product Information



AG-82

Item No. 10010312

CAS Registry No.: 118409-58-8

Formal Name: 2-[(3,4,5-trihydroxyphenyl)methylene]-

propanedinitrile

Synonyms: NSC 676484, RG-50875, Tyrphostin

25, Tyrphostin AG-82

MF: $C_{10}H_6N_2O_3$ FW: 202.2 ≥95% **Purity:**

Stability: ≥2 years at -20°C Supplied as: A crystalline solid UV/Vis.: λ_{max} : 250, 389 nm

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Laboratory Procedures

For long term storage, we suggest that AG-82 be stored as supplied at -20°C. It should be stable for at least two years. AG-82 is supplied as a crystalline solid. A stock solution may be made by dissolving the AG-82 in an organic solvent purged with an inert gas. AG-82 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AG-82 in these solvents is approximately 20 mg/ml in ethanol and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of AG-82 can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of AG-82 in PBS, pH 7.2, is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Protein tyrosine kinase (PTK) inhibitors are potential antiproliferative agents for diseases caused by the hyperactivity of PTKs. Tyrphostins are a class of antiproliferative compounds that act as PTK blockers. PTK inhibitors which preferentially inhibit the epidermal growth factor (EGF) receptor kinase block EGF-dependent cell proliferation. 1 AG-82 is an inhibitor of EGF receptor kinase with an IC₅₀ value of 3 μ M in the human epidermoid carcinoma cell line A431.¹

Reference

1. Gazit, A., Yaish, P., Gilon, C., et al. Tyrphostins I: Synthesis and biological activity of protein tyrosine kinase inhibitors. J. Med. Chem. 32(10), 2344-2352 (1989).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10010312

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all. of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications

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