PRODUCT INFORMATION



AG-555

Purity:

Item No. 23247

CAS Registry No.: 133550-34-2

Formal Name: (2E)-2-cyano-3-(3,4-dihydroxyphenyl)-

N-(3-phenylpropyl)-2-propenamide

Synonyms: Tyrphostin AG-555, Tyrphostin B46

MF: $C_{19}H_{18}N_2O_3$ FW: 322.4

UV/Vis.: λ_{max} : 257, 362 nm Supplied as: A crystalline solid

≥95%

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

AG-555 is supplied as a crystalline solid. A stock solution may be made by dissolving the AG-555 in the solvent of choice, which should be purged with an inert gas. AG-555 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AG-555 in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

AG-555 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AG-555 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AG-555 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AG-555 is a tyrphostin inhibitor of the EGF receptor (EGFR; $IC_{50} = 0.7 \mu M$).¹ It selectively inhibits EFGR over ErbB2 (IC $_{50}$ = 35 μ M). AG-555 inhibits EGF-dependent growth of HER 14 cells $(IC_{50} = 2.5 \mu M)$ as well as the growth of psoriatic keratinocytes isolated from patients with psoriasis when used at concentrations ranging from 1 to 50 μM.^{1,2} It also inhibits Moloney murine leukemia virus (Mo-MuLV) reverse transcriptase activity (IC₅₀ = 10.8 μ M) without affecting Mo-MuLV-infected NIH3T3 cell growth (IC₅₀ = 210 μ M).³

References

- 1. Gazit, A., Osherov, N., Posner, I., et al. Tyrphostins. 2. Heterocyclic and α-substituted benzylidenemalononitrile tyrphostins as potent inhibitors of EGF receptor and ErbB2/neu tyrosine kinases. J. Med. Chem. 34(6), 1896-1907 (1991).
- 2. Ben-Bassat, H., Vardi, D.V., Gazit, A., et al. Tyrphostins suppress the growth of psoriatic keratinocytes. Exp. Dermatol. 4(2), 82-88 (1995).
- 3. Esther, A., Iftach, S., and Esther, P. Inhibition of Moloney murine leukemia virus replication by tyrphostins, tyrosine kinase inhibitors. FEBS Lett. 341(1), 99-103 (1994).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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