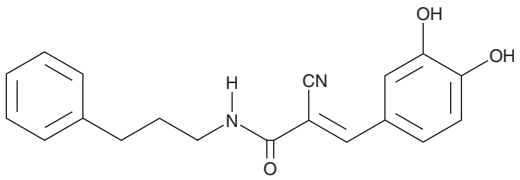
PRODUCT INFORMATION

AG-555

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
Purity:	≥95%
UV/Vis.:	λ_{max}: 257, 362 nm
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

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 µM).[1] It selectively inhibits EFGR over ErbB2 (IC_{50} = 35 µM). AG-555 inhibits EGF-dependent growth of HER 14 cells (IC_{50} = 2.5 µM) 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 (IC_{50} = 10.8 µM) without affecting Mo-MuLV-infected NIH3T3 cell growth (IC_{50} = 210 µM).[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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM