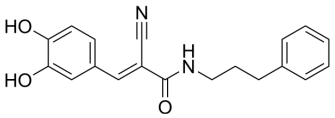
AG 555

Cat. No.:	HY-15336
CAS No.:	133550-34-2
Molecular Formula:	$C_{19}H_{18}N_2O_3$
Molecular Weight:	322.36
Target:	EGFR; Reverse Transcriptase
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (310.21 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
1 mM	3.1021 mL	15.5106 mL	31.0212 mL
5 mM	0.6204 mL	3.1021 mL	6.2042 mL
10 mM	0.3102 mL	1.5511 mL	3.1021 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (7.76 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.76 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

AG 555 (Tyrphostin AG 555), a potent antiretroviral agent, is a potent and selective inhibitor of EGFR and blocks Cdk2 activation[1][2].

IC_{50} & Target

EGFR

In Vitro

AG 555 (100 μM) inhibits both the early stages (integration process) and the late stages (viral protein synthesis) in the virus life cycle[1].

Tyrphostins AG555, which blocks Cdk2 activation, induces growth arrest of immortalized cells at G1-S and early S and is very effective in arresting the growth of EGFR overexpressor cells[2].

Tyrphostin AG 555 can selectively suppress BPV-1 transcription through MAP kinase pathway activation and binding of phosphorylated Jun/ATF-2 at a novel intragenic regulatory sequence[3].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay[1]

Cell Line:	NIH/3T3 uninfected cells and NIH/3T3-Mo-MuLV chronically infected cells.
Concentration:	100 μM.
Incubation Time:	1 hour.
Result:	Inhibited Mo-MuLV proviral DNA integration.

REFERENCES

[1]. Seri E Aflalo, et al. Tyrphostin AG-555 inhibits early and late stages of Moloney murine leukemia virus replication cycle. International Journal of Oncology. 1997.

[2]. Nir Osherov, et al. Tyrphostin AG494 blocks Cdk2 activation Nir Osherov. FEBS Letters 410 (1997) 187-190.

[3]. Sabine Baars, et al. Tyrphostin AG 555 Inhibits Bovine Papillomavirus Transcription by Changing the Ratio between E2 Transactivator/Repressor Function. Vol. 278, No. 39, Issue of September 26, pp. 37306–37313, 2003.

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