**AG 555**

*Cat. No.:* HY-15336  
*CAS No.:* 133550-34-2  
*Molecular Formula:* C_{19}H_{18}N_{2}O_{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.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concentration</td>
<td>1 mg</td>
</tr>
<tr>
<td></td>
<td>1 mM</td>
<td>3.1021 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.6204 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.3102 mL</td>
</tr>
</tbody>
</table>

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 drug, is a potent and selective inhibitor of EGFR and blocks Cdk2 activation\[^1\][^2].

**IC\textsubscript{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]

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>NIH/3T3 uninfected cells and NIH/3T3-Mo-MuLV chronically infected cells.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration:</td>
<td>100 μM.</td>
</tr>
<tr>
<td>Incubation Time:</td>
<td>1 hour.</td>
</tr>
<tr>
<td>Result:</td>
<td>Inhibited Mo-MuLV proviral DNA integration.</td>
</tr>
</tbody>
</table>

REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.

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