

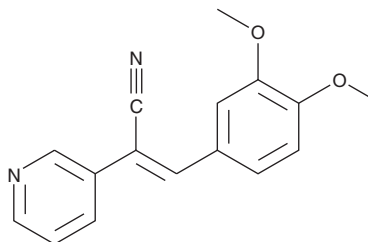
PRODUCT INFORMATION



RG-13022

Item No. 10010309

CAS Registry No.: 149286-90-8
Formal Name: α Z-[(3,4-dimethoxyphenyl)methylene]-3-pyridineacetonitrile
MF: C₁₆H₁₄N₂O₂
FW: 266.3
Purity: \geq 98%
UV/Vis.: λ_{max} : 248, 356 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

RG-13022 is supplied as a crystalline solid. A stock solution may be made by dissolving the RG-13022 in the solvent of choice, which should be purged with an inert gas. RG-13022 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RG-13022 in ethanol is approximately 2 mg/ml and approximately 10 mg/ml in DMSO and DMF.

RG-13022 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RG-13022 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. RG-13022 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

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 that preferentially inhibit the epidermal growth factor (EGF) receptor kinase block EGF-dependent cell proliferation.¹ RG-13022 is an inhibitor of EGF receptor kinase with an IC₅₀ value of 1 μ M in HT-22 cells.²

References

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).
2. Sagara, Y., Ishige, K., Tsai, C., *et al.* Tyrphostins protect neuronal cells from oxidative stress. *J. Biol. Chem.* **277**(39), 36204-36215 (2002).

WARNING

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

SAFETY DATA

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.

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