AG-126
Item No. 13297

CAS Registry No.: 118409-62-4
Formal Name: 2-[(3-hydroxy-4-nitrophenyl)methylene]-propanedinitrile
Synonym: Tyrphostin AG-126
MF: C₁₀H₅N₃O₃
FW: 215.2
Purity: ≥95%
UV/Vis.: λ_max: 210, 305 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

AG-126 is supplied as a crystalline solid. A stock solution may be made by dissolving the AG-126 in the solvent of choice, which should be purged with an inert gas. AG-126 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AG-126 in ethanol is approximately 0.15 mg/ml and approximately 10 mg/ml in DMSO and DMF.
AG-126 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AG-126 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AG-126 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

Tyrphostins are a family of protein tyrosine kinase inhibitors originally developed to inhibit cell growth by blocking the activity of certain growth factor receptor kinases (GFRK). The tyrphostin AG-126 selectively inhibits the phosphorylation of ERK1 (p44) and ERK2 (p42) at 25-50 μM.1,2 It blocks the production of TNF-α in vitro and in vivo, attenuating signaling through NF-κB, the induced expression of COX-2 and iNOS, and the inflammatory response in diverse animal models.1-5 AG-126 is a poor inhibitor of epidermal GFRK (IC₅₀ = 450 μM) and platelet-derived GFRK (IC₅₀ > 100 μM).6-7

References