

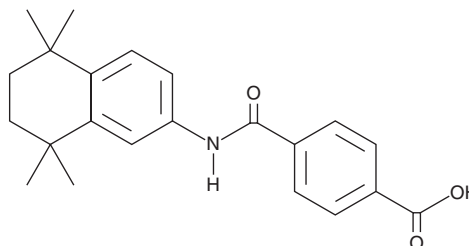
PRODUCT INFORMATION



AM80

Item No. 71770

CAS Registry No.: 94497-51-5
Formal Name: 4-[[[(5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthalenyl)amino]carbonyl]-benzoic acid
Synonyms: Amnolake, NSC 608000, Retinobenzoic Acid, Tamibarotene
MF: C₂₂H₂₅NO₃
FW: 351.4
Purity: ≥98%
UV/Vis.: λ_{max}: 236, 291 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

AM80 is supplied as a crystalline solid. A stock solution may be made by dissolving the AM80 in the solvent of choice, which should be purged with an inert gas. AM80 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of AM80 in these solvents is approximately 20, 30, and 50 mg/ml, respectively.

Description

AM80 is a retinoic acid receptor agonist that is selective for RAR α (K_d = 62 nM; AC_{50} = 1.46 nM) compared to RAR β (K_d = 280 nM; AC_{50} = 6.87 nM) and RAR γ (K_d = 816 nM; AC_{50} = 148.7 nM).¹ It demonstrates greater specific binding to RAR α compared to retinoic acid (Item No. 11017), which exhibits little selectivity across RAR α , β , or γ .^{1,2} AM80 exhibits antiproliferative effects against acute promyelocytic leukemia cells, inducing human promyelocytic leukemia HL-60 cell differentiation with an ED_{50} value of 0.79 nM.^{2,3} It has also been shown to suppress the growth of other myeloid and lymphoid malignant cells.²

References

1. Bernard, B.A., Bernardon, J.-M., Delescluse, C., *et al.* Identification of synthetic retinoids with selectivity for human nuclear retinoic acid receptor γ . *Biochem. Biophys. Res. Commun.* **186**(2), 977-983 (1992).
2. Jimi, S., Mashima, K., Matsumoto, T., *et al.* RAR α is a regulatory factor for Am-80-induced cell growth inhibition of hematologic malignant cells. *Int. J. Oncol.* **31**(2), 397-404 (2007).
3. Eyrolles, L., Kagechika, H., Kawachi, E., *et al.* Retinobenzoic Acids. 6. Retinoid antagonists with a heterocyclic ring. *J. Med. Chem.* **37**(10), 1508-1517 (1994).

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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