



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

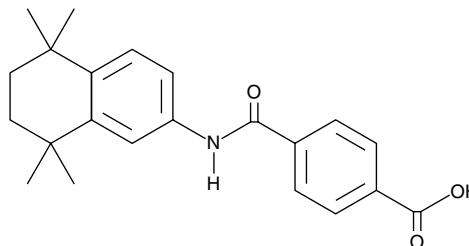
# Product Information



## 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:** C<sub>22</sub>H<sub>25</sub>NO<sub>3</sub>  
**FW:** 351.4  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 236, 291 nm



### Laboratory Procedures

For long term storage, we suggest that AM80 be stored as supplied at -20°C. It should be stable for at least two years.

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

AM80 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

AM80 is a retinoic acid receptor agonist that is selective for RAR $\alpha$  (K<sub>d</sub> = 62 nM; AC<sub>50</sub> = 1.46 nM) compared to RAR $\beta$  (K<sub>d</sub> = 280 nM; AC<sub>50</sub> = 6.87 nM) and RAR $\gamma$  (K<sub>d</sub> = 816 nM; AC<sub>50</sub> = 148.7 nM).<sup>1</sup> It demonstrates greater specific binding to RAR $\alpha$  compared to retinoic acid (Item No. 11017), which exhibits little selectivity across RAR $\alpha$ ,  $\beta$ , or  $\gamma$ .<sup>1,2</sup> AM80 exhibits antiproliferative effects against acute promyelocytic leukemia cells, inducing human promyelocytic leukemia HL-60 cell differentiation with an ED<sub>50</sub> value of 0.79 nM.<sup>2,3</sup> It has also been shown to suppress the growth of other myeloid and lymphoid malignant cells.<sup>2</sup>

### References

1. Bernard, B.A., Bernardon, J.-M., Delescluse, C., *et al.* Identification of synthetic retinoids with selectivity for human nuclear retinoic acid receptor  $\gamma$ . *Biochem. Biophys. Res. Commun.* **186**(2), 977-983 (1992).
2. Jimi, S., Mashima, K., Matsumoto, T., *et al.* RAR $\alpha$  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).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/71770](http://www.caymanchem.com/catalog/71770)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog**.

Copyright Cayman Chemical Company, 03/26/2014

### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

(800) 364-9897  
(734) 971-3335

#### Fax

(734) 971-3640

#### E-Mail

[custserv@caymanchem.com](mailto:custserv@caymanchem.com)

#### Web

[www.caymanchem.com](http://www.caymanchem.com)