

Product Data Sheet

Product Name: AM9053
Cat. No.: GC81683

Chemical Properties

Cas. No. 157469-21-1

Formula $C_{17}H_{25}NS$ M.Wt 275.45

Solubility DMSO: 50 mg/mL (181.52 mM; Need ultrasonic) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

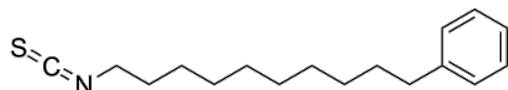
Caution: Product has not been fully validated for medical applications. For research use only.

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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Structure



Background

AM9053 is a selective, effective and slowly reversible inhibitor of N-acyl ethanolamine acid amidease (NAAA) ($IC_{50} = 30$ nM). The effect of AM9053 on FAAH activity is limited ($IC_{50} > 100$ nM).

AM9053 inhibits the proliferation of colorectal cancer cells by activating the PPAR- α and TRPV1 dependent mechanisms and induces S-phase cell cycle arrest. AM9053 alleviates intestinal fibrosis by regulating macrophage activity and inhibiting the IL-23 signaling pathway. AM9053 leads to an increase in NAE levels, especially PEA and OEA. AM9053 can be used for the study of colorectal cancer and intestinal fibrosis [1] [2] [3].

References:

[1]. Bottemanne P, et al. N-acylethanolamine hydrolyzing acid amidase inhibition: tools and potential therapeutic opportunities. Drug Discov Today. 2018 Aug;23(8):1520-1529.

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- [2]. Nani MF, et al. Pharmacological Inhibition of N-Acylethanolamine Acid Amidase (NAAA) Mitigates Intestinal Fibrosis Through Modulation of Macrophage Activity. J Crohns Colitis. 2025 Feb 4;19(2):jjae132.
- [3]. Romano B, et al. N-Acylethanolamine acid amidase (NAAA) is dysregulated in colorectal cancer patients and its inhibition reduces experimental cancer growth. Br J Pharmacol. 2022 Apr;179(8):1679-1694.

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