

AM 374

## Chemical Properties

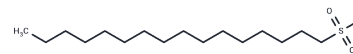
CAS No. : 86855-26-7

Formula: C16H33FO2S

Molecular Weight: 308.5

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	AM 374 (HDSF), a fatty acid amide hydrolase (FAAH) inhibitor, demonstrates the capacity to inhibit amidase activity, boasting an IC50 value of 13 nM. This compound is potentially applicable in neurological disease research.
Targets(IC50)	FAAH
In vitro	AM 374 (0-9 nM) inhibits anandamide degradation in N18TG2 cells. [1]
In vivo	AM 374 (20 µg ; intraventricular injection, once) has no effect on lever pressing in FR5, but when used in combination with anandamide (intraperitoneal injection), it reduces lever pressing.[2]

## Solubility Information

Solubility	DMSO: 62.5 mg/mL (202.59 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (6.48 mM),Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	3.2415 mL	16.2075 mL	32.4149 mL
5 mM	0.6483 mL	3.2415 mL	6.483 mL
10 mM	0.3241 mL	1.6207 mL	3.2415 mL
50 mM	0.0648 mL	0.3241 mL	0.6483 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Deutsch DG, et al. Fatty acid sulfonyl fluorides inhibit anandamide metabolism and bind to the cannabinoid receptor. *Biochem Biophys Res Commun.* 1997;231(1):217-221.

Arizzi MN, et al. Behavioral effects of inhibition of cannabinoid metabolism: The amidase inhibitor AM374 enhances the suppression of lever pressing produced by exogenously administered anandamide. *Life Sci.* 2004;74(8):1001-1011.

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