

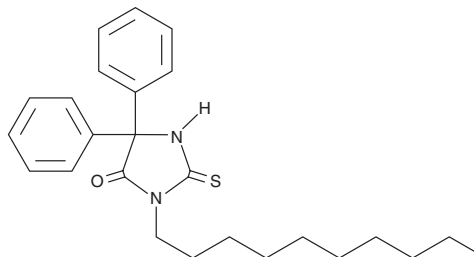
# PRODUCT INFORMATION



**CAY10570**

Item No. 10010032

**CAS Registry No.:** 875014-22-5  
**Formal Name:** 3-decyl-5,5'-diphenyl-2-thioxo-4-imidazolidinone  
**MF:** C<sub>25</sub>H<sub>32</sub>N<sub>2</sub>OS  
**FW:** 408.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 203, 273 nm  
**Supplied as:** A solution in methyl acetate  
**Storage:** -20°C  
**Stability:** ≥2 years



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

## Laboratory Procedures

CAY10570 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of CAY10570 in ethanol and DMSO is approximately 30 mg/ml and approximately 20 mg/ml in DMF.

## Description

The enzyme fatty acid amide hydrolase (FAAH) is capable of hydrolyzing and inactivating anandamide and other fatty acid amides that act as agonists for the central cannabinoid (CB<sub>1</sub>) receptor.<sup>1</sup> CAY10570 is a reversible competitive inhibitor of FAAH activity exhibiting an IC<sub>50</sub> value of 1.3 μM.<sup>2</sup> CAY10570 has no affinity for the human CB<sub>1</sub> receptor and acts as a competitive inhibitor of FAAH activity without being hydrolyzed by the enzyme.<sup>2</sup>

## References

1. Cravatt, B.F., Giang, D.K., Mayfield, S.P., *et al.* Molecular characterization of an enzyme that degrades neuromodulatory fatty-acid amides. *Nature* **384(6604)**, 83-87 (1996).
2. Muccioli, G.G., Fazio, N., Scriba, G.K.E., *et al.* Substituted 2-thioxoimidazolidin-4-ones and imidazolidine-2,4-diones as fatty acid amide hydrolase inhibitors templates. *J. Med. Chem.* **49(1)**, 417-425 (2006).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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