

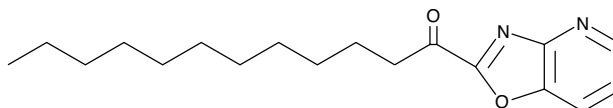
# Product Information



## CAY10435

Item No. 10005102

**CAS Registry No.:** 288862-73-7  
**Formal Name:** 1-oxazolo[4,5-b]pyridin-2-yl-1-dodecanone  
**MF:** C<sub>18</sub>H<sub>26</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 302.4  
**Purity:** ≥98%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in methyl acetate  
**UV/Vis.:** λ<sub>max</sub>: 235, 296 nm



### Laboratory Procedures

For long term storage, we suggest that CAY10435 be stored as supplied at -20°C. It should be stable for at least one year.

CAY10435 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 purged with an inert gas can be used. The solubility of CAY10435 in these solvents is approximately 10 mg/ml.

CAY10435 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of CAY10435 should be diluted with the aqueous buffer of choice. CAY10435 has a solubility of approximately 0.05 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Fatty acid amide hydrolase (FAAH) is the enzyme responsible for hydrolysis and inactivation of fatty acid amides including anandamide and oleamide. CAY10435 is a selective, potent inhibitor of rat FAAH exhibiting a K<sub>i</sub> value of 0.57 nM.<sup>1</sup> Using a proteomics approach, CAY10435 was screened against the serine hydrolase family of enzymes, of which FAAH is a member. In this assay, CAY10435 exhibited IC<sub>50</sub> values of 0.81 nM, 83 nM, and 50 μM for FAAH, triacylglycerol hydrolase (TGH), and an uncharacterized hydrolase (KIAA1363), respectively.<sup>2</sup> Knowledge of the specificity of CAY10435 obtained from this experiment should allow for more accurate interpretation of results using the inhibitor in complex environments such as whole cells or animals.

### References

1. Boger, D.L., Sato, H., Lerner, A.E., *et al.* Exceptionally potent inhibitors of fatty acid amide hydrolase: The enzyme responsible for degradation of endogenous oleamide and anandamide. *Proc. Natl. Acad. Sci. USA* **97**, 5044-5049 (2000).
2. Leung, D., Hardouin, C., Boger, D.L., *et al.* Discovering potent and selective reversible inhibitors of enzymes in complex proteomes. *Nature Biotechnology* **21**(6), 687-691 (2003).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10005102](http://www.caymanchem.com/catalog/10005102)

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

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