

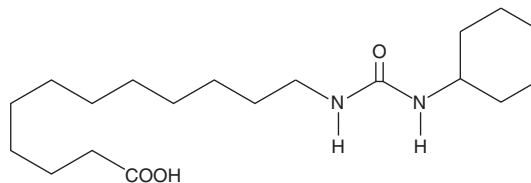
PRODUCT INFORMATION



CUDA

Item No. 10007923

CAS Registry No.: 479413-68-8
Formal Name: 12-[[[(cyclohexylamino)carbonyl]amino]-
dodecanoic acid
MF: C₁₉H₃₆N₂O₃
FW: 340.5
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

CUDA is supplied as a crystalline solid. A stock solution may be made by dissolving the CUDA in an organic solvent purged with an inert gas. CUDA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CUDA in these solvents is 1, 5, and 10 mg/ml, respectively.

Description

Epoxyeicosatrienoic acid (EpETrE; EET) metabolites of arachidonic acid such as 11(12)-EET and 14(15)-EET have been identified as endothelium derived hyperpolarizing factors with vasodilator activity.¹ Soluble epoxide hydrolase (sEH) catalyzes the conversion of EETs to the corresponding dihydroxy eicosatrienoic acids (DiHETrEs; DHETs) thereby diminishing their activity. CUDA is an inhibitor of sEH exhibiting IC₅₀ values of 11.1 nM and 112 nM for the mouse and human enzymes, respectively.² In COS-7 cells, 10 μM CUDA blocks conversion of 1 μM 14,15-EET to 14,15-DHET by 94%. CUDA activates peroxisome proliferator-activated receptor α (PPARα) 8-fold at a concentration of 10 μM but exhibits no affect on PPARδ or PPARγ.³

References

1. Fleming, I. Cytochrome P450 epoxygenases as EDHF synthase(s). *Pharmacol. Res.* **49**, 525-533 (2004).
2. Morisseau, C., Goodrow, M.H., Newman, J.W., *et al.* Structural refinement of inhibitors of urea-based soluble epoxide hydrolases. *Biochem. Pharmacol.* **63**, 1599-1608 (2002).
3. Fang, X., Hu, S., Watanabe, T., *et al.* Activation of peroxisome proliferator-activated receptor α by substituted urea-derived soluble epoxide hydrolase inhibitors. *J. Pharmacol. Exp. Ther.* **314**(1), 260-270 (2005).

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.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM