

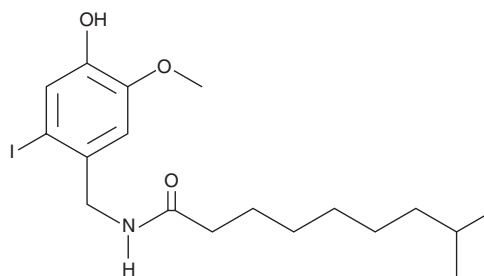
PRODUCT INFORMATION



CAY10448

Item No. 10005633

CAS Registry No.: 1177195-52-6
Formal Name: N-[(4-hydroxy-2-iodo-3-methoxyphenyl)methyl]-8-methyl-nonanamide
MF: C₁₈H₂₈INO₃
FW: 433.3
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 236, 287 nm
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

CAY10448 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10448 in the solvent of choice, which should be purged with an inert gas. CAY10448 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CAY10448 in these solvents is approximately 30 mg/ml.

CAY10448 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10448 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CAY10448 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Capsaicin is the primary active component of the heat and pain-eliciting lipid soluble fraction of the *Capsicum* pepper.¹ Capsaicin signals are transduced by a heat-activated ion channel, the vanilloid receptor 1 (VR1), or transient receptor potential vanilloid 1 (TRPV1).² CAY10448 is an iodinated nonivamide, a potent capsaicin receptor antagonist with an IC₅₀ value of approximately 10 nM.³

References

1. Gannett, P.M., Nagel, D.L., Reilly, P.J., *et al.* The capsaicinoids: Their separation, synthesis, and mutagenicity. *J. Org. Chem.* **53**(5), 1064-1071 (1988).
2. Caterina, M.J., Schumacher, M.A., Tominaga, M., *et al.* The capsaicin receptor: A heat-activated ion channel in the pain pathway. *Nature* **389**(6653), 816-824 (1997).
3. Daddario, N., Minassi, A., Appendino, G., *et al.* The taming of capsaicin. Synthesis and vanilloid antagonistic activity of isosteric and regioisomeric halononiv amides and their products of halogen-carbon exchange. *14th Annual Symposium on the Cannabinoids* **137**, (2004).

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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