

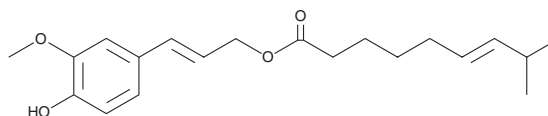
PRODUCT INFORMATION



Capsiconiate

Item No. 18172

CAS Registry No.: 946572-73-2
Formal Name: 8-methyl-6E-nonenic acid
3-(4-hydroxy-3-methoxyphenyl)-2E-propen-1-yl ester
Synonym: Coniferyl (E)-8-methyl-6-nonenate
MF: C₂₀H₂₈O₄
FW: 332.4
Purity: ≥98%
UV/Vis.: λ_{max}: 213, 254, 294 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Capsiconiate is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol 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 capsiconiate in these solvents is approximately 20 mg/ml.

Capsiconiate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of capsiconiate should be diluted with the aqueous buffer of choice. Capsiconiate 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

Capsiconiate is a coniferyl ester that has been isolated from certain plants in the Solanaceae family, including plants in the genus *Capsicum*.¹ It is structurally related to capsaicin (Item No. 92350), the primary heat- and pain-eliciting compound from the *Capsicum* pepper.² Like capsaicin, capsiconiate is an agonist of the transient receptor potential vanilloid receptor TRPV1 (EC₅₀ = 3.2 μM).¹ However, the maximum response induced by capsiconiate through TRPV1 is only 20% of that of capsaicin, indicating that it's a partial agonist of TRPV1.¹

References

1. Kobata, K., Tate, H., Iwasaki, Y., *et al.* Isolation of coniferyl esters from *Capsicum baccatum* L., and their enzymatic preparation and agonist activity for TRPV1. *Phytochem.* **69(5)**, 1179-1184 (2008).
2. 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).

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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