

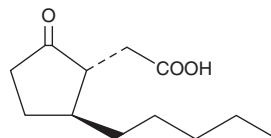
PRODUCT INFORMATION



CAY10696

Item No. 9002313

Formal Name: 2-((1R,5S)-2-oxo-5-pentylcyclopentyl)acetic acid
MF: C₁₂H₂₀O₃
FW: 212.3
Purity: ≥95%
Supplied as: A 1 mg/ml 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

CAY10696 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 CAY10696 in these solvents is approximately 100, 10, and 20 mg/ml, respectively.

CAY10696 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of CAY10696 should be diluted with the aqueous buffer of choice. The solubility of CAY10696 in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Phytoenoic and phytodienoic acids are cyclopentenone oxylipins biosynthesized in plants from linoleic acid (Item No. 90150).¹⁻³ Cyclopentenones are converted to cyclopentanones by reductases, as occurs in the jasmonic acid pathway.² CAY10696 is a 12-carbon cyclopentanone that is structurally related to a variety of plant oxylipins. Its physiological actions are not known.

References

1. Ogorodnikova, A.V., Gorina, S.S., Mukhtarova, L.S., *et al.* Stereospecific biosynthesis of (9S,13S)-10-oxo-phytoenoic acid in young maize roots. *Biochim. Biophys. Acta* **1851(9)**, 1262-1270 (2015).
2. Schaller, A. and Stintzi, A. Enzymes in jasmonate biosynthesis - Structure, function, regulation. *Phytochemistry* **70(13-14)**, 1532-1538 (2009).
3. Grechkin, A.N., Mukhtarova, L.S., Latypova, L.R., *et al.* Tomato CYP74C3 is a multifunctional enzyme not only synthesizing allene oxide but also catalyzing its hydrolysis and cyclization. *Chembiochem* **9(15)**, 2498-2505 (2008).

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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