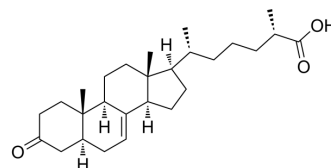


(25S)- Δ 7-Dafachronic acid

Cat. No.:	HY-130221
CAS No.:	949004-12-0
Molecular Formula:	C ₂₇ H ₄₂ O ₃
Molecular Weight:	414.62
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(25S)- Δ 7-Dafachronic acid is a ligand and activator of DAF-12 receptor. DAF-12 is a nuclear hormone receptor that regulates larval diapause, developmental age, and adult longevity in <i>Caenorhabditis elegans</i> ^{[1][2][3]} .
In Vitro	(25S)- Δ 7-Dafachronic acid is a potent transcriptional activator in a Gal4-transactivation assay using HEK-293 cells (EC50: 33 nM) ^[2] . (25S)- Δ 7-Dafachronic acid (10 μ M, 48 h) stimulates larval growth and development ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. null
- [2]. Martin R, et al. Stereoselective synthesis of the hormonally active (25S)-delta7-dafachronic acid, (25S)-Delta4-dafachronic acid, (25S)-dafachronic acid, and (25S)-cholestenoic acid. *Org Biomol Chem*. 2008 Dec 7;6(23):4293-5.
- [3]. Sharma KK, et al. Synthesis and activity of dafachronic acid ligands for the *C. elegans* DAF-12 nuclear hormone receptor. *Mol Endocrinol*. 2009 May;23(5):640-8.
- [4]. Ma G, et al. Dafachronic acid promotes larval development in *Haemonchus contortus* by modulating dauer signalling and lipid metabolism. *PLoS Pathog*. 2019 Jul 23;15(7):e1007960.

Caution: Product has not been fully validated for medical applications. For research use only.

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