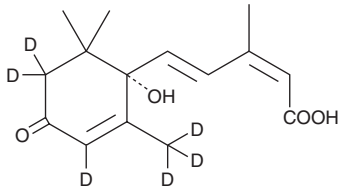
PRODUCT INFORMATION

(+)-Abscisic Acid-d_6

Item No. 29093

CAS Registry No.: 721948-65-8
Formal Name: (2Z,4E)-5-[(1S)-1-hydroxy-6,6-dimethyl-2-(methyl-d_3)-4-oxo-2-cyclohexen-1-yl-3,5,5-d_3]-3-methyl-2,4-pentadienoic acid
Synonyms: (+)-ABA-d_6, Dormin-d_6
MF: $C_{15}H_{14}D_6O_4$
FW: 270.4
Chemical Purity: ≥98% ((+)-Abscisic Acid)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_6); ≤1% d_0
Supplied as: A 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

(+)-Abscisic acid (ABA)-d_6 is intended for use as an internal standard for the quantification of (+)-abscisic acid (Item No. 10073) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

(+)-ABA-d_6 is supplied as a solid. A stock solution may be made by dissolving the (+)-ABA-d_6 in the solvent of choice, which should be purged with an inert gas. (+)-ABA-d_6 is soluble in DMSO. (+)-ABA-d_6 is slightly soluble in ethanol and methanol.

Description

ABA is a plant hormone with diverse roles in disease resistance, plant development, and response to stresses (water, salt, temperature, and pathogens).[1-3] In addition to key roles in regulating stomatal closing, seed dormancy, and cell division, ABA regulates gene expression and may contribute to epigenetic changes at the chromatin level.[4] The (+)-enantiomer is the naturally occurring and more active form of ABA.

References

1. Ton, J., Flors, V., and Mauch-Mani, B. The multifaceted role of ABA in disease resistance. *Trends Plant Sci.* **14(6)**, 310-317 (2009).
2. Seo, M., Nambara, E., Choi, G., *et al.* Interaction of light and hormone signals in germinating seeds. *Plant. Mol. Biol.* **69(4)**, 463-472 (2009).
3. Acharya, B.R. and Assmann, S.M. Hormone interactions in stomatal function. *Plant Mol. Biol.* **69(4)**, 451-462 (2009).
4. Demetriou, K., Kapazoglou, A., Tondelli, A., *et al.* Epigenetic chromatin modifiers in barley: I. Cloning, mapping and expression analysis of the plant specific *HD2* family of histone deacetylases from barley, during seed development and after hormonal treatment. *Physiol. Plant.* **136(3)**, 358-368 (2009).

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.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/10/2025

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