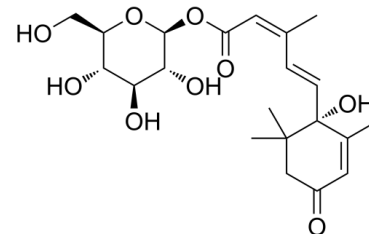


Data Sheet

Product Name:	β-D-Glucopyranosyl abscisate
Cat. No.:	CS-0094773
CAS No.:	21414-42-6
Molecular Formula:	C ₂₁ H ₃₀ O ₉
Molecular Weight:	426.46
Target:	Others
Pathway:	Others
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

β-D-Glucopyranosyl abscisate (ABA-GE) is a hydrolyzable abscisic acid (ABA) conjugate that accumulates in the vacuole and presumably also in the endoplasmic reticulum. The deconjugation of β-D-Glucopyranosyl abscisate allows the rapid formation of free ABA in response to abiotic stress conditions such as dehydration and salt stress. β-D-Glucopyranosyl abscisate contributes to the maintenance of ABA homeostasis^[1]. **In Vitro:** Deconjugation of β-D-Glucopyranosyl abscisate (ABA-GE) by the endoplasmic reticulum and vacuolar β-glucosidases allows the rapid formation of free ABA in response to abiotic stress conditions such as dehydration and salt stress. β-D-Glucopyranosyl abscisate further contributes to the maintenance of ABA homeostasis, as it is the major ABA catabolite exported from the cytosol. Vacuolar transport of β-D-Glucopyranosyl abscisate is mediated by ATP-binding cassette and proton-antiport mechanisms in Arabidopsis^[1].

References:

[1]. Burla B, Pfrunder S, Nagy R, Francisco RM, Lee Y, Martinoia E. Vacuolar transport of abscisic acid glucosyl ester is mediated by ATP-binding cassette and proton-antiport mechanisms in Arabidopsis. Plant Physiol. 2013;163(3):1446 - 1458.

CAIndexNames:

β-D-Glucopyranose, 1-[(2Z,4E)-5-[(1S)-1-hydroxy-2,6,6-trimethyl-4-oxo-2-cyclohexen-1-yl]-3-methyl-2,4-pentadienoate]

SMILES:

O[C@H]1[C@H](OC/C=C(C)C=C[C@@]2(O)C(C)=CC(CC2(C)C)=O)O[C@H](CO)[C@@H](O)[C@@H]1O

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

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA