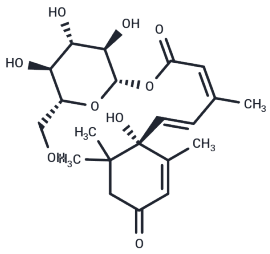
Data Sheet (Cat.No.T39605)

TargetMol

β-D-Glucopyranosyl abscisate

Chemical Properties



CAS No. : 21414-42-6

Formula: C21H30O9

Molecular Weight: 426.46

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	β-D-Glucopyranosyl abscisate (ABA-GE) is a hydrolyzable conjugate of abscisic acid (ABA) that predominantly accumulates in the vacuole and likely in the endoplasmic reticulum. The deconjugation of β-D-Glucopyranosyl abscisate enables a swift release of free ABA in response to abiotic stress factors such as dehydration and salt stress, playing a crucial role in maintaining ABA homeostasis.
Targets(IC50)	Others,Proton pump
In vitro	Endoplasmic reticulum and vacuolar β-glucosidases catalyze the deconjugation of β-D-Glucopyranosyl abscisate (ABA-GE), facilitating swift production of free ABA under abiotic stress conditions like dehydration and salt stress. Additionally, β-D-Glucopyranosyl abscisate plays a pivotal role in ABA homeostasis by being the principal catabolite exported from the cytosol. In arabidopsis[1], its vacuolar transport involves ATP-binding cassette and proton-antiport mechanisms.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3449 mL	11.7244 mL	23.4489 mL
5 mM	0.469 mL	2.3449 mL	4.6898 mL
10 mM	0.2345 mL	1.1724 mL	2.3449 mL
50 mM	0.0469 mL	0.2345 mL	0.469 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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.

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