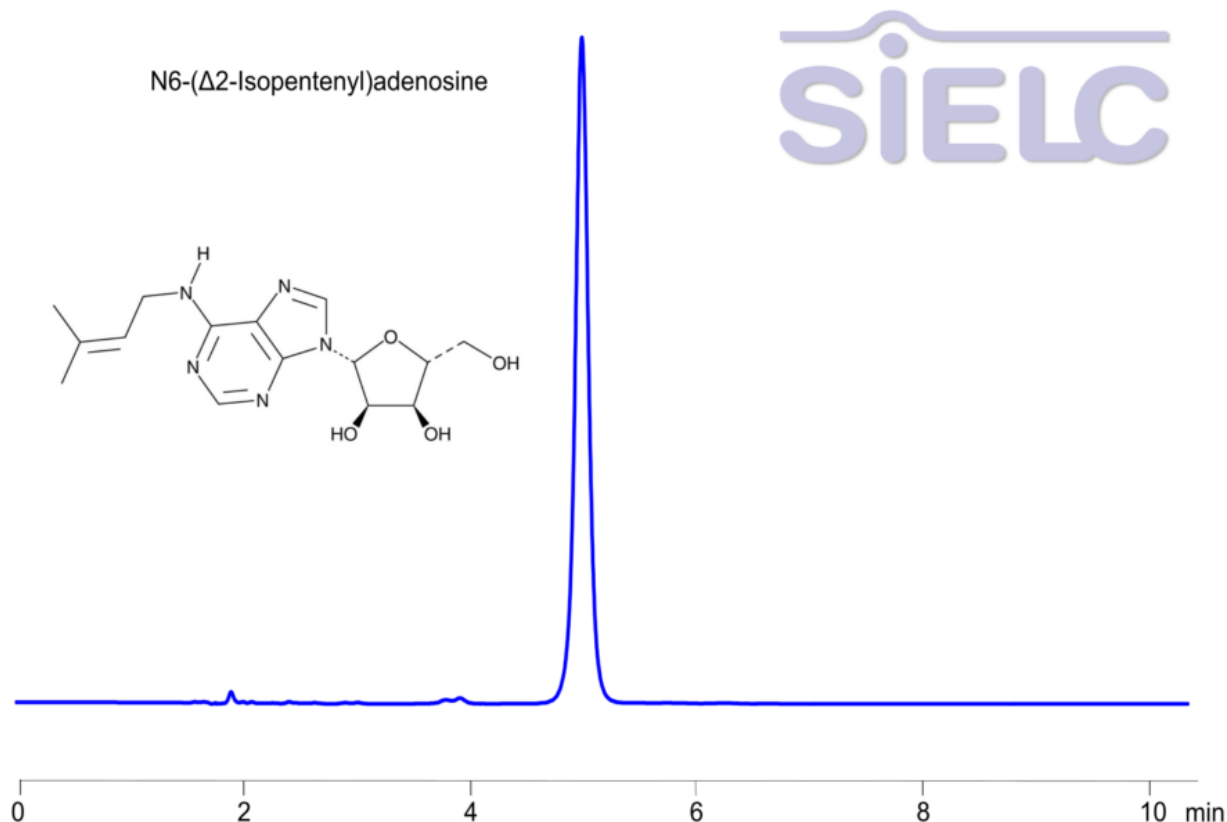


HPLC Method for Analysis of N6-(Δ^2 -Isopentenyl)adenine on Primesep 100 Column

<https://sielc.com/hplc-method-isopentenyladenine>

Chromatogram



Column:	Primesep 100
Column size:	4.6 × 150 mm, 5 μ m
Column part number:	100-46.150.0510
Mobile phase:	MeCN/H ₂ O - 50/50%
Buffer:	H ₂ SO ₄ - 0.2%
Flow rate	1.0 ml/min
Detection:	UV 205 nm
Concentration:	0.1 mg/ml
Injection Volume:	2 μ L
Diluent:	MeCN/H ₂ O - 50/50%
Limit of Detection:	3 ppb

Description

· Separation type: Liquid Chromatography Mixed-mode SIELC Technologies · HPLC Method for Analysis of N6-(Δ^2 -Isopentenyl)adenine on Primesep 100 Column

N6-(Δ^2 -Isopentenyl)adenine (iP) is a cytokinin, a plant hormone that regulates cell division and growth. Like trans-Zeatin, it is part of the adenine-derived cytokinin family and plays a significant role in promoting plant development and differentiation.

This compound is particularly important in both natural plant physiology and agricultural biotechnology, where it is applied to stimulate growth or improve crop yields.

N6-(Δ^2 -Isopentenyl)adenine can be retained, separated and analyzed using a Primesep 100 mixed-mode stationary phase column. The analysis employs an isocratic method with a simple mobile phase comprising water, acetonitrile (MeCN), and sulfuric acid as a buffer. This method allows for detection using UV 210 nm.

You can find detailed UV spectra of N6-(Δ^2 -Isopentenyl)adenine and information about its various lambda maxima by visiting the following link .

Method Parameters

Mobile Phase	MeCN – 50%
Buffer	H2SO4 -0.2%
Flow Rate	1.0 ml/min
Detection	UV 205 nm
Sample	0.1 mg/ml
Diluent	MeCN/H2O- 50/50%
LOD*	3 ppb
Class of Compounds	Phytohormone
Analyzing Compounds	N6-(Δ^2 -Isopentenyl)adenine

HPLC Column Used

Primesep 100, 4.6 x 150 mm, 5 μ m, 100 Å, dual ended

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)