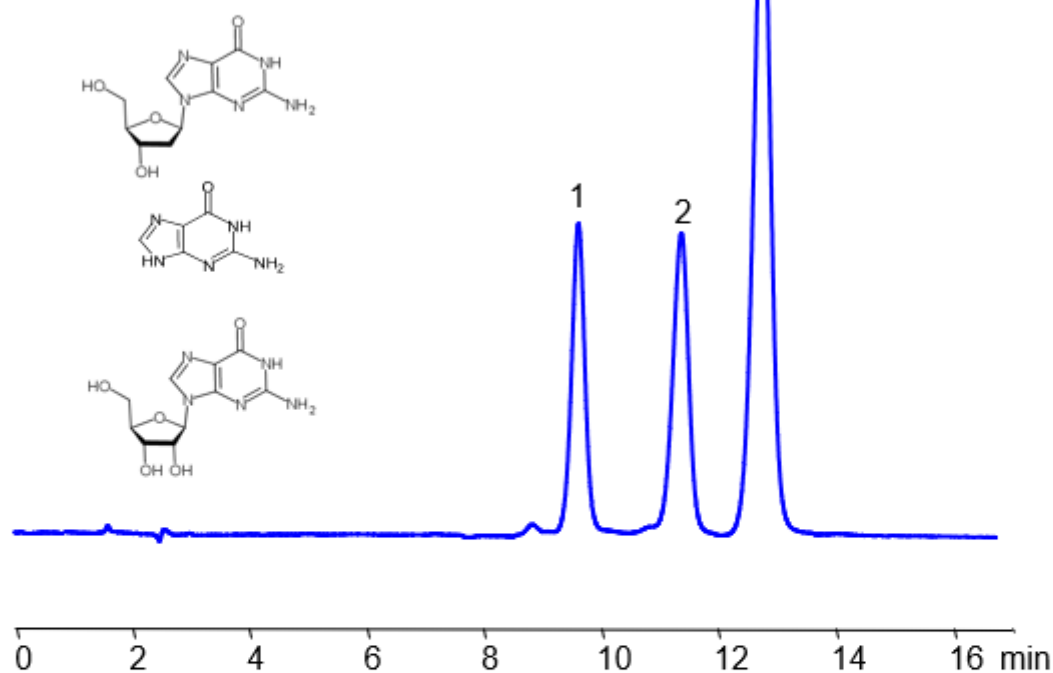


HPLC Method for Analysis of Deoxyguanosine, Guanine and Guanosine on BIST B+

<https://sielc.com/hplc-method-of-guanosine>

Chromatogram

1. Deoxyguanosine
2. Guanine
3. Guanosine



Column:	BIST B+
Column size:	4.6 × 150 mm, 5 µm
Column part number:	TBP-46.150.0510
Mobile phase:	MeCN – 85%
Buffer:	H ₃ PO ₄ - 0.2%
Flow rate:	1.0 mL/min
Detection:	UV 260 nm

Description

· HPLC Method for Analysis of Guanine , Guanosine , Deoxyguanosine on BIST B+ by SIELC Technologies .

Deoxyguanosine is a deoxyribonucleoside with the chemical formula C₁₀ H₁₃ N₅ O₄ . It is a vital part of what makes up DNA.

Guanine , also noted as G and Gua , has the chemical formula $C_5H_5N_5O$. By forming three hydrogen bonds with the Cytosine, it creates a base pair. It's name comes from the Spanish term "guano", meaning bird or bat dropping, as that is said to have been how it was first discovered. Outside of DNA, Guanine that is harvested from fish scales, is occasionally used in cosmetics for it's luster.

Guanosine is a purine nucleoside with the chemical formula $C_{10}H_{13}N_5O_5$. It can be phosphorylated into many other forms, which play vital roles in biochemical processes like synthesis of nucleic acids, proteins, photosynthesis, and more. It is also required for RNA splicing.

Guanine , Guanosine , Deoxyguanosine can be retained and analyzed using the BIST B+ stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN). Detection is performed using UV.

Method Parameters

Mobile Phase	MeCN – 85%
Buffer	H ₃ PO ₄ – 0.2%
Flow Rate	1.0 ml/min
Detection	UV 260 nm
Peak Retention Time	9.6, 11.2, 12.8 min
Class of Compounds	Nucleosides
Analyzing Compounds	Guanine, Guanosine, Deoxyguanosine

HPLC Column Used

BIST B+, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

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