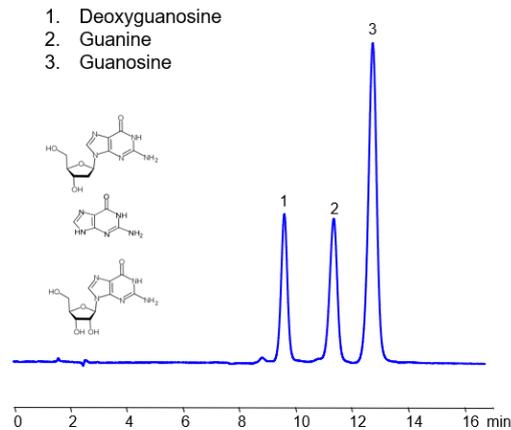


HPLC Method for Analysis of Deoxyguanosine, Guanine and Guanosine on BIST B+



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

Deoxyguanosine is a deoxyribonucleoside with the chemical formula C₁₀H₁₃N₅O₄. It is a vital part of what makes up DNA.

Guanine, also noted as G and Gua, has the chemical formula C₅H₅N₅O. By forming three hydrogen bonds with the Cytosine, it creates a base pair. Its 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 its luster.

Guanosine is a purine nucleoside with the chemical formula C₁₀H₁₃N₅O₅. 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

Column	BIST B+, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	MeCN – 85%
Buffer	H ₃ PO ₄ – 0.2%
Flow Rate	1.0 mL/min
Detection	UV 260 nm

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