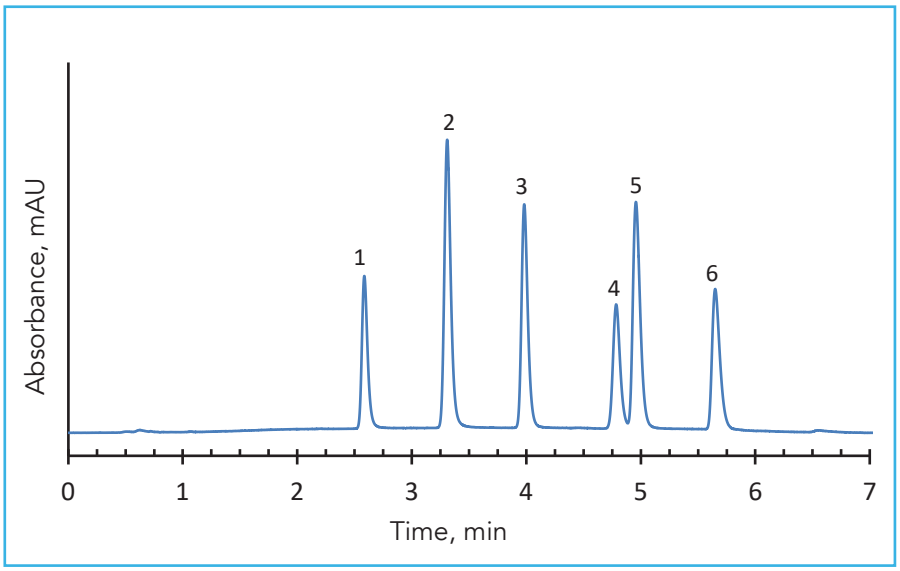
HALO®

BIOPHARMACEUTICALS

Separation of Nucleotides on HALO® Penta-HILIC, 2.7 µm

Application Note 101-B



PEAK IDENTITIES:

1. Adenosine monophosphate (AMP)
2. Guanosine monophosphate (GMP)
3. Adenosine diphosphate (ADP)
4. Guanosine diphosphate (GDP)
5. Adenosine triphosphate (ATP)
6. Guanosine triphosphate (GTP)

This separation demonstrates the utility of the HALO® Penta-HILIC phase for analysis of nucleotides. Fused-Core® technology gives high resolution separations at moderate pressures without the difficulties of using sub two-micron-particle columns.

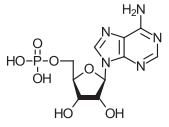
TEST CONDITIONS:

Column: HALO 90 Å Penta-HILIC, 2.7 µm, 2.1 x 100 mm
Part Number: 92812-605
Mobile Phase:
A: 50/50 acetonitrile/0.025 M ammonium phosphate, pH 6.0
B: 75/25 acetonitrile/0.025 M ammonium phosphate, pH 6.0
Gradient:

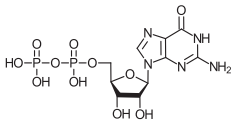
Time (min)	% B
0.0	90
8.0	40

Flow Rate: 0.3 mL/min
Pressure: 76 bar
Temperature: 50 °C
Detection: UV 260 nm, DAD
Injection Volume: 1.0 µL
Sample Solvent: Mobile phase B
Response Time: 0.02 sec
Data Rate: 40 Hz
Flow Cell: 1.0 µL micro cell
LC System: Shimadzu Nexera

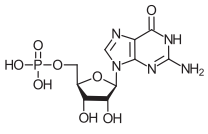
STRUCTURES:



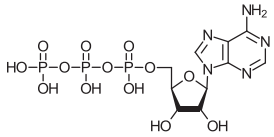
Adenosine Monophosphate



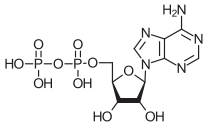
Guanosine Diphosphate



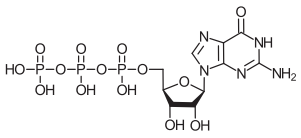
Guanosine Monophosphate



Adenosine Triphosphate



Adenosine Diphosphate



Guanosine Triphosphate

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