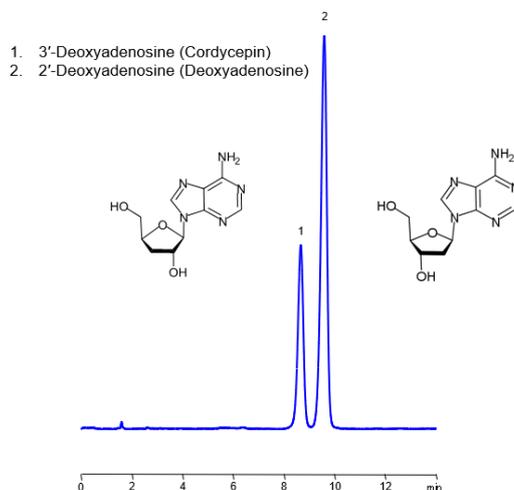


## HPLC Method for Analysis of 3'-Deoxyadenosine and 2'-Deoxyadenosine on BIST B+ Column



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

Cordycepin is an adenosine analogue with the chemical formula C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>3</sub>. It is reported to prevent cell reproduction in various cancer cells. It also might possess antioxidant and anti-inflammatory properties, when considered in addition with its ability to cross the blood-brain barrier, it may become widely used in pharmaceuticals.

Deoxyadenosine is a deoxyribonucleoside with the chemical formula C<sub>10</sub>H<sub>13</sub>N<sub>5</sub>O<sub>3</sub>. It is a derivative of adenosine. High presence of it can kill T lymphocytes and kill those cells, leading to adenosine deaminase severe combined immunodeficiency disease, also known as ADA-SCID.

Cordycepin, Deoxyadenosine 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) with a Phosphoric Acid buffer. Detection is performed using UV.

### Method Parameters

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

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