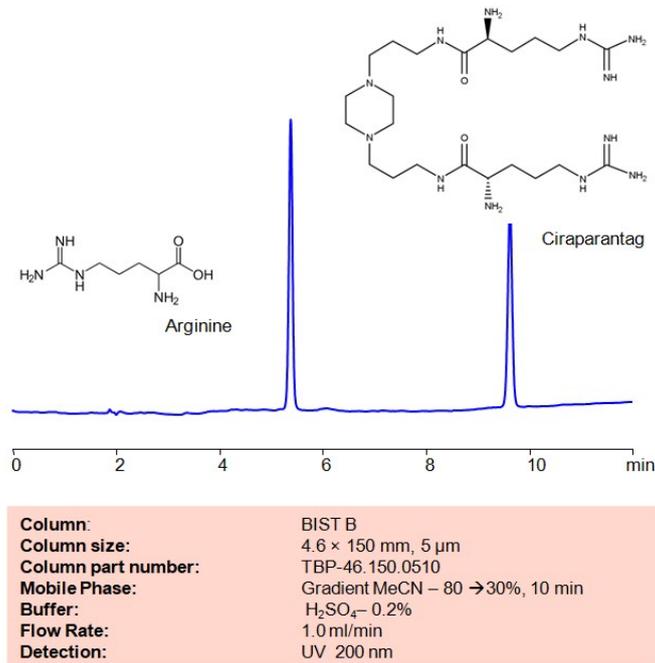


HPLC Method for Separation of Arginine and Ciraparantag on BIST B Column Column



Separation type: Bridge Ion Separation Technology, or BIST™ by SIELC Technologies

Ciraparantag, also known as andexanet alfa, is a recombinant modified human factor Xa (FXa) protein. It is designed to reverse the anticoagulant effects of direct and indirect factor Xa inhibitors, such as rivaroxaban, apixaban, edoxaban, and enoxaparin.

Ciraparantag works by binding to the factor Xa inhibitors in the bloodstream, thereby neutralizing their anticoagulant activity. This reversal agent can be particularly useful in emergency situations where rapid reversal of anticoagulation is necessary, such as in cases of severe bleeding or when urgent surgery is required.

Ciraparantag has been approved for use in some regions, including the United States, for the treatment of life-threatening or uncontrolled bleeding associated with factor Xa inhibitor therapy. It is typically administered intravenously under the supervision of healthcare professionals.

It's important to note that ciraparantag is not effective against anticoagulants that do not target factor Xa, such as warfarin. Additionally, like any medication, ciraparantag may have potential side effects, and its use should be carefully monitored by healthcare providers.

Ciraparantag can be retained and analyzed on a BIST B column using an analytical method with a simple mobile phase of water, Acetonitrile (MeCN), and a sulfonic acid as a buffer. This analysis method can be detected using LC MS.

Method Parameters

Column	BIST B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended
Mobile Phase	Gradient MeCN – 85-30%
Buffer	H2SO4 – 0.2%
Flow Rate	1.0 mL/min
Detection	UV 200 nm

Quelle: <https://sielc.com/hplc-ms-determination-of-ciraparantag>