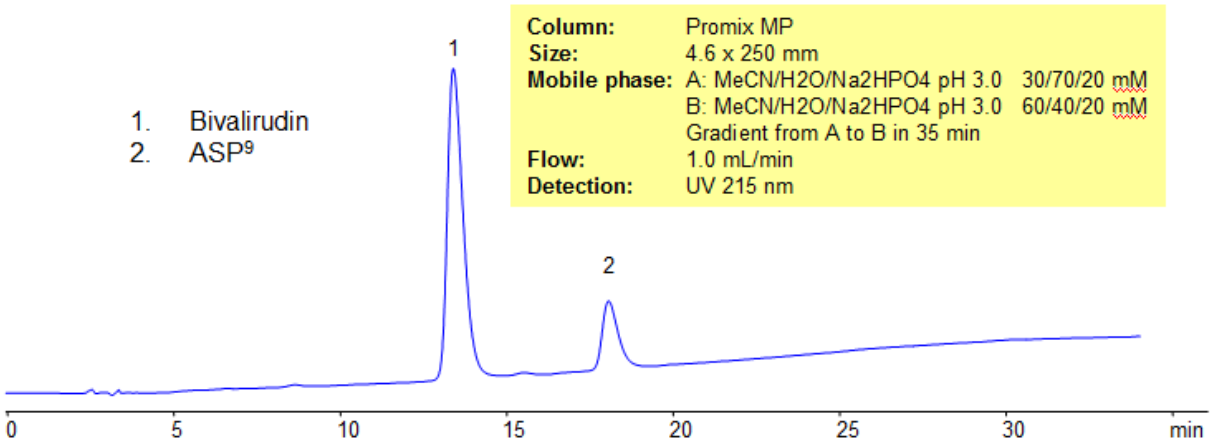
HPLC Analysis of Bivalirudin on Promix MP colum



Bivalirudin is a short 21 amino acids peptide. It has 2 basic and 6 acidic groups. It is a naturally occurred an anticoagulant. Asp 9 – bivalirudin is a process impurity and can be a result of degradation of bivalirudin drug.

The Promix family of mixed-mode columns presents an innovative chromatography technology for the efficient resolution of peptides and proteins. This technology hinges on a unique blend of hydrophobic and ionic interactions, facilitated by a novel separation medium: a ligand bonded to a silica support, chemically combined with hydrophobic and ionic functional groups . This phase provides unparalleled selectivity and peak capacity . By independently adjusting the quantities of buffer and organic modifier, a virtually infinite number of separation conditions can be achieved, rendering it suitable for a wide array of biomolecules.

Method Parameters

Column	Promix MP, 4.6×250 mm, 5 µm, 100 Å
Mobile Phase	Gradient MeCN – 30-60%, 35 min
Buffer	Na2HPO4pH 3.0- 20 mM
Flow Rate	1.0 mL/min
Detection	UV, 215 nm

Quelle: https://sielc.com/hplc%20analysis%20of%20bivalirudin