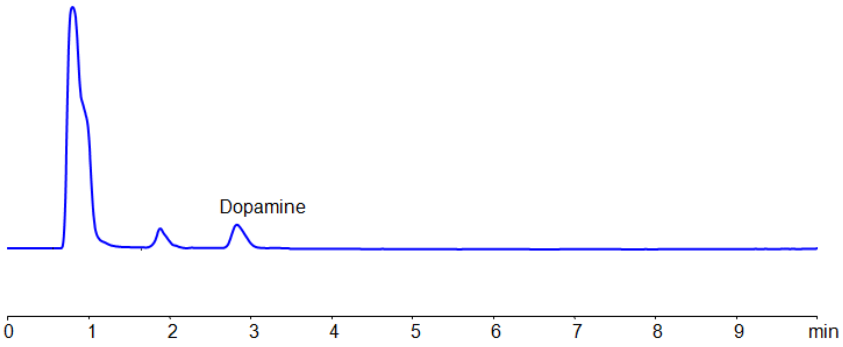
HPLC Determination of Dopamine in Serum



Column:	Primesep 200
Column size:	4.6 × 100 mm, 5 µm
Guard column:	Primesep SB
Guard size:	4.6 × 50 mm, 5 µm
Switching time:	0.8 min
Mobile phase:	MeCN/H2O–20/80%
Buffer:	AmFm 20mM
Flow rate:	1 mL/min
UV detection:	280
Second pump Mobile Phase:	ACN/H2O- 50/50 % AmFM 20 mM

High Performance Liquid Chromatography (HPLC) Method for Analysis of Dopamine .

Dopamine is a neurotransmitter with the chemical formula C8H11NO2 . It is released during pleasurable activities, reinforcing those behaviors, and motivating people to continue seeking them out. Dopamine influences the release of other hormones. A deficiency of it can influence movement and lead to conditions like Parkinson's disease.

FlipLC™ is an alternative method to avoid the interference of most of the contaminants by the use of an isolation column and a high pressure switching valve before the separation column. This method allows sample cleaning and analyte separation in one automated process. The isolation column and the separation column should have orthogonal retention characteristics to operate efficiently in this setup. Mixed-mode columns with reverse phase and ion-exchange characteristics were used in this analysis.

Method Parameters

Column	Primesep 200, 4.6×150 mm, 5 µm, 100 Å Primesep SB, 4.6*50 mm, 5 µm, 100 Å
Mobile Phase	MeCN/H2O
Buffer	AmFm pH 3.0
Flow Rate	1.0 mL/min
Detection	UV, 280 nm

Quelle: https://sielc.com/hplc-determination-of-dopamine-in-serum

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