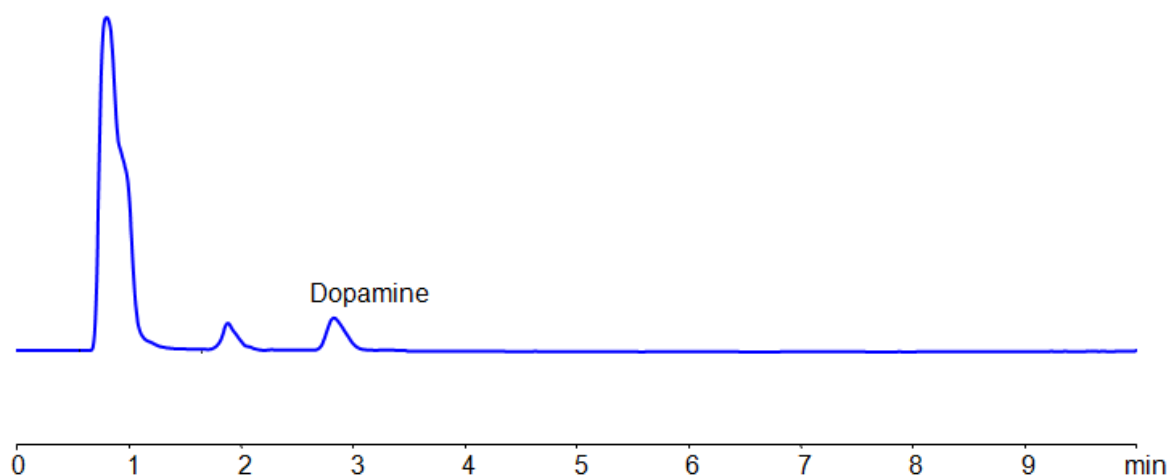


HPLC Determination of Dopamine in Serum

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

Chromatogram



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/H ₂ O–20/80%
Buffer:	AmFm 20mM
Flow rate:	1 mL/min
UV detection:	280
Second pump Mobile Phase:	ACN/H ₂ O- 50/50 % AmFM 20 mM

Description

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

Dopamine is a neurotransmitter with the chemical formula $C_8H_{11}NO_2$. 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

Mobile Phase	MeCN/H ₂ O
Buffer	AmFm pH 3.0
Flow Rate	1.0 ml/min

Detection	UV, 280 nm
Class of Compounds	Drug, Hydrophilic, Ionizable, Hormone
Analyzing Compounds	Dopamine

HPLC Column Used

Primesep 200, 4.6×150 mm, 5 µm, 100ÅPrimesep SB, 4.6*50 mm, 5 µm, 100Å

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)