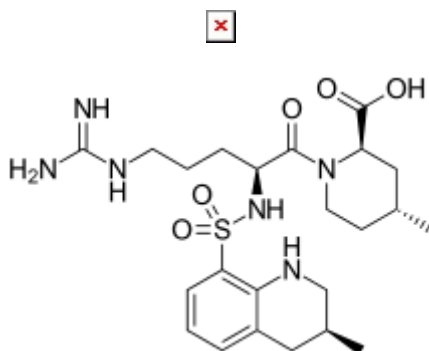


Argatroban analyzed with HPLC – AppNote

A simple method for this di-peptide

A rapid, sensitive, and reproducible method has been developed for this blood thinner. The data below, (*an overlay of 10 chromatograms*) illustrates how the compound can be adequately retained and detected using this straightforward method.

A phenyl ring in the column stationary phase provides strategic use of π - π Interaction with the analyte making possible the use of a very simple, Mass Spec-friendly mobile phase with formic acid as an additive.



Peak:

Argatroban

Method Conditions

Column: Cogent Phenyl Hexyl™, 4 μ m, 100Å

Catalog No.: 68539-15P

Dimensions: 4.6mm x 150mm

Mobile Phase:

A: DI water

B: Acetonitrile

| Time (minutes) | %B |
|----------------|----|
| 0 | 25 |
| 1 | 25 |
| 3 | 50 |
| 4 | 50 |
| 5 | 25 |
| 8 | 25 |

Injection vol.: 2 μ L

Flow rate: 1.0mL / minute

Detection: UV @ 215nm

Sample Preparation: 0.5 mg / mL in 50:50 acetonitrile / DI water

%RSD: <1.0%

t₀: 1.5 minutes

K': 1.35

Notes: Argatroban is a synthetic direct thrombin inhibitor used for the prevention and treatment of thrombosis related to heparin use. It acts as a preventative of the formation of blood clots, which reduces the risk for stroke or other medical conditions.

Note 2: Capacity is determined using the following equation: $k = (t_R - t_0)/t_0$

- t_R = Retention time of an analyte peak
- t_0 = Retention time of non-retained peak

