

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.

Argatroban



Method Conditions

Column: Cogent Phenyl Hexyl[™], 4µm, 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.: 2µL

Flow rate: 1.0mL / minute Detection: UV @ 215nm

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



%RSD: <1.0% **t_o:** 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

