

## DETERMINATION OF PATULIN IN DRIED APPLE

**Regulations for solid apple products:**  
Europe (EC 1881/2006) : 25µg/Kg

### PROTOCOL OF PURIFICATION

#### Sample preparation

3g of dried apple dices, 30mL of water and 150µL of pectinase are mixed and left at room temperature overnight. Then, they are centrifuged at 4500rpm during 5min and filtered with 0.2µm filter to obtain the loading solution.

#### Purification with a 6mL/200mg AFFINIMIP® SPE Patulin cartridge

##### Equilibration

- 4mL Acetonitrile
- 2mL Water

##### Loading

- 10mL of loading solution

##### Washing of interferences (W1)

- 5mL Water-2% Acetic Acid
- 5mL Water

##### Drying by applying vacuum 30 seconds

##### Washing of interferences (W2)

- 500µL Diethyl Ether

##### Elution (E)

- 2mL Ethyl Acetate

The elution fraction was then evaporated and dissolved in water containing 0.1% acetic acid before HPLC analysis.

### HPLC Method

Column: Atlantis T3 column, 150mm x 2.1mm

Mobile phase: gradient profile

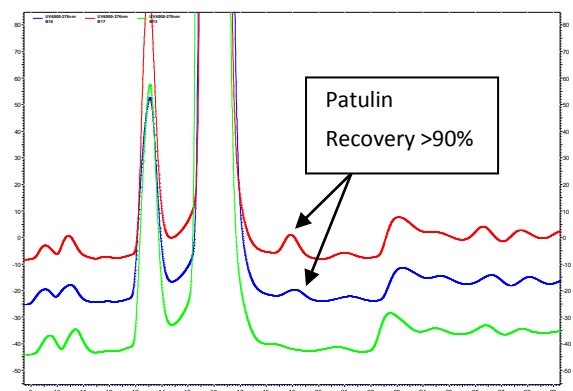
Time (min)	% water	% ACN
0	98	2
20	98	2
21	50	50
25	50	50
26	98	2

Flow rate: 0.2mL/min

Detection: UV - 276nm

Injection volume: 100µL.

### RESULTS



Chromatograms obtained after AFFINIMIP® SPE Patulin Clean-up of dried apple dices spiked at 20µg/kg (red) or at 10µg/kg (blue) with Patulin or not spiked (green).

#### Catalog number:

*6mL - 200mg sorbent for a DRIED APPLE or higher enrichment with apple juice*

FS102-02B-200mg for 25 cartridges

FS102-03B-200mg for 50 cartridges

FS102-02KB-200mg for a kit of 25 cartridges + 50mL Pectinase

FS102-03KB-200mg for a kit of 50 cartridges + 50mL Pectinase

REA-001-50mL for 50mL Pectinase solution