

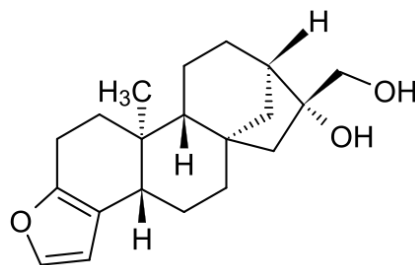
Quantification of Cafestol og Kahweol in Coffee using LC-UV (DAD)

Cafestol and kahweol are fat-soluble compounds known as diterpenes, which are present in the oil derived from coffee beans.

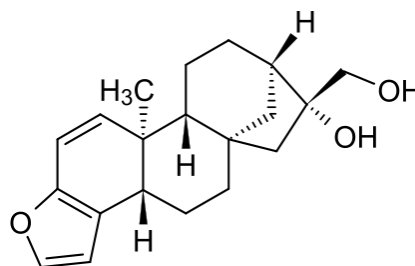
Cafestol occurs in both robusta and arabica beans. It is present in unfiltered coffee brews and raises serum concentrations of cholesterol and triacylglycerols in humans. Unfiltered coffee also contains the related compound kahweol, which occurs only in the major coffee strain arabica.

It has also been claimed that both diterpenes have anti-carcinogenic effects. Epidemiological studies have found an inverse association between coffee consumption and the risk of certain types of cancers such as colorectal cancers.

Vitas AM-232 quantifies Cafestol and Kahweol using sample hydrolysis and LC-UV analysis.



Cafestol

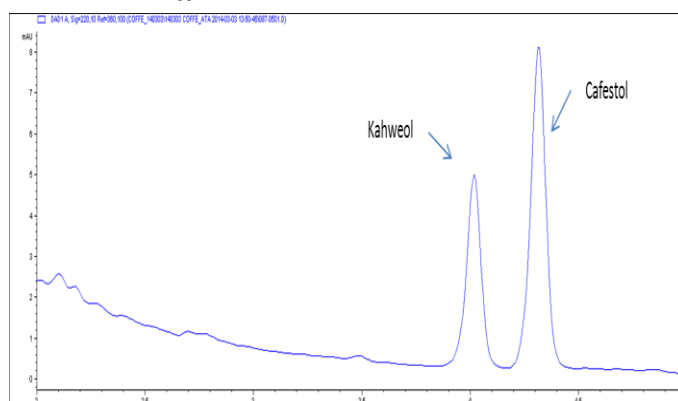


Kahweol

Method details:

- Technique: LC-UV (DAD)
- Sample Matrix: Coffee
- Sample amount: 5 ml
- Range: 7-30 µg/ml
- Detection Limit: 1 µg/ml
- Intra-day precision: 5-15%
- Inter-day precision: 10%
- Shipping temp: Ambient

Chromatogram of cafestol and kahweol in brewed coffee



Vitas is a Norwegian GMP certified chemical analysis contract lab, with 20 years experience in providing a high quality, custom chromatographic analytical service based on cutting-edge knowledge and technology.