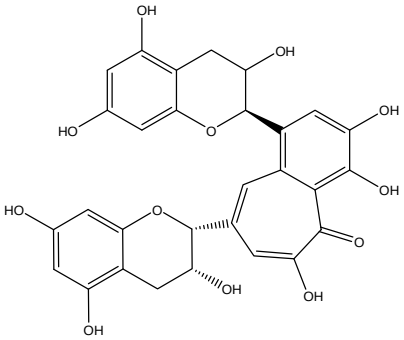
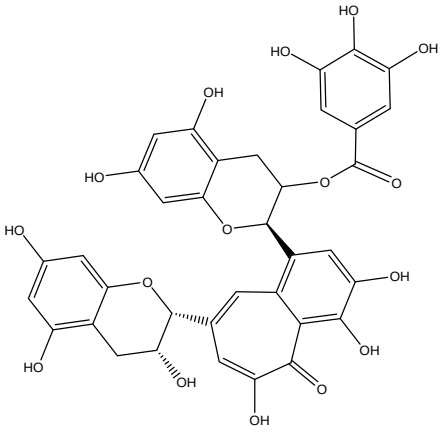
紅茶中のテアフラビン類　Theaflavins

ポリフェノール構造をもつテアフラビン類は、抗酸化作用があり、紅茶成分中に含まれています。CAPCELL PAK C_{18} MGIII S3（2.0 mm i.d. x 150 mm）**を用い、紅茶中のテアフラビン類の分析例を示します。**

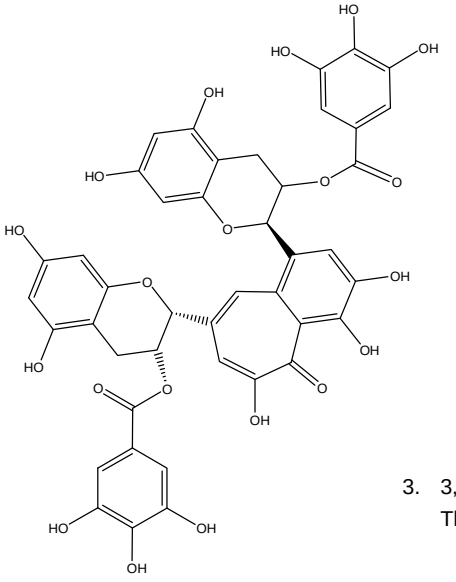
Theaflavins with polyphenol structure is contained in the tea ingredient, and is said to have anti-oxidant effect. Shown here is an analysis example of theaflavins in black tea by using the CAPCELL PAK C_{18} MGIII S3 (2.0 mm id x 150 mm).



1. **テアフラビン** (25 μg/mL)
   Theaflavin (M.W. 564.5)

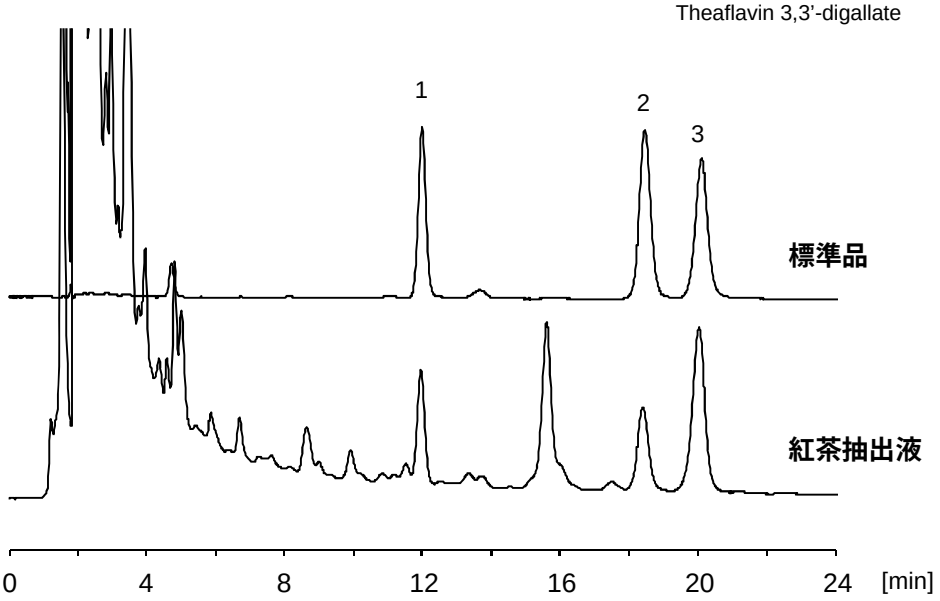


2. 3'–**没食子酸テアフラビン** (25 μg/mL)
   Theaflavin 3'-gallate (M.W. 716.6)



3. 3,3'–**二没食子酸テアフラビン** (25 μg/mL)
   Theaflavin 3,3'-digallate (M.W. 868.7)

1. **テアフラビン**
   Theaflavin
2. 3'-**没食子酸テアフラビン**
   Theaflavin 3'-gallate
3. 3,3'-**二没食子酸テアフラビン**
   Theaflavin 3,3'-digallate



【HPLC Conditions】

Column	: CAPCELL PAK C_{18} MGIII S3 ; 2.0 mm i.d. x 150 mm
Mobile phase	: 0.1 vol% HCOOH / CH_3CN = 77 / 23
Flow rate	: 200 μL/min
Temperature	: 40 ˚C
Detection	: UV 280 nm
Inj. vol.	: 1 μL
Sample dissolved in	: Each standard compound was dissolved in 50 vol% methanol. 2 g of the tea leaves was dispersed in 50 mL methanol. The dispersion was sonicated (10 min) and filtered with a 0.2-μm filter.

※ 1 μg/mL = 1 ppm