

Highly sensitive detection of DL-flavanone with circular dichroism (CD) detector

The optically active compound DL-flavanone was detected using a dedicated circular dichroism detector (CD-1595).

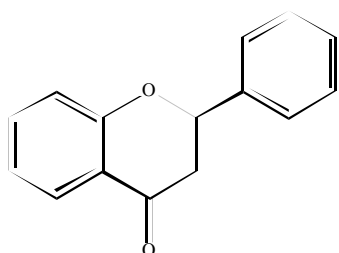
Fig. 1 shows optically resolved CD spectrum of 1mg DL-flavanone analyzed using the CD-1595 with stopped flow and the full wavelength range chromatograms.

The CD spectrum makes it easy to select the required wavelength.

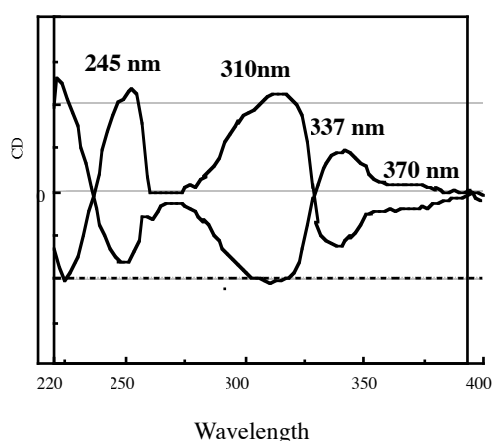
Fig. 2 shows the CD-1595, OR-990 optical rotation detector and MD-910 diode array detector chromatograms of 0.1mg DL-flavanone.

The CD-1595 can detect the D or L forms with good sensitivity.

Keywords: 1.flavanone, 2.STD, 3.CHRALCEL OD, 4.CIRCULAR DICHROISM BASED DETECTOR



Flavanone



Conditions:

Column: CHRALCEL OD (4.6 mmI.D. x 250 mmL)
 Eluent: n-Hexane/IPA(90/10)
 Flow rate: 1.0mL/min
 Column temperature: 25 degree celsius
 Sample: DL-flavanone
 Injection volume: 10uL

CD-1595
 Scale: 1mV = 1mdeg
 Response: Standard
 Polarity: +

OR-990
 Scale: 1mV = 1mdeg
 Gain: x10
 Response: Standard
 Polarity: +

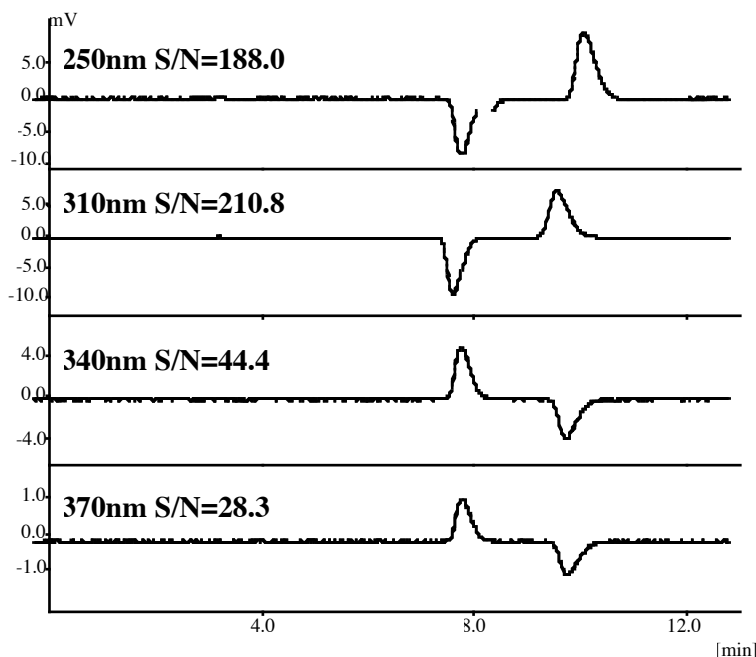


Fig. 1 CD spectrum of DL-flavanone (1 mg) and full wavelength range chromatograms

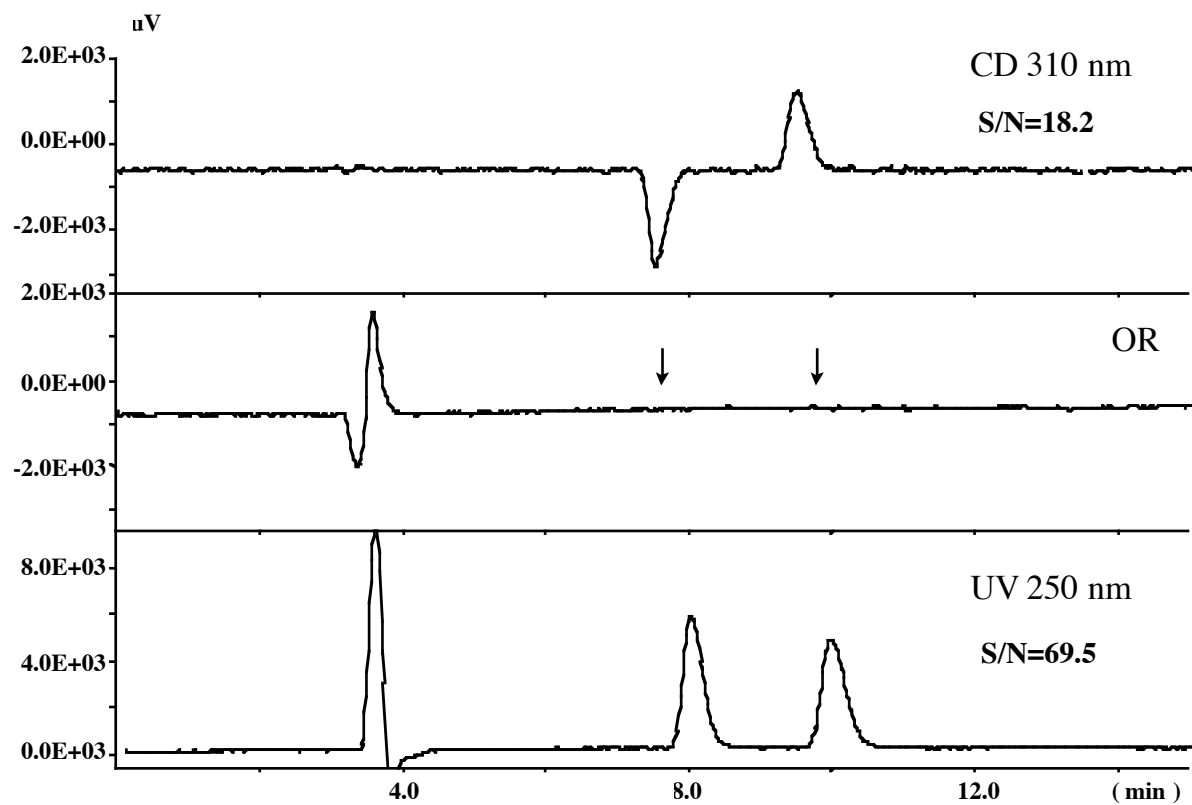


Fig. 2 CD-1595 (310 nm), OR-990 and MD-910 (250 nm) chromatograms of 0.1mg DL-flavonone.