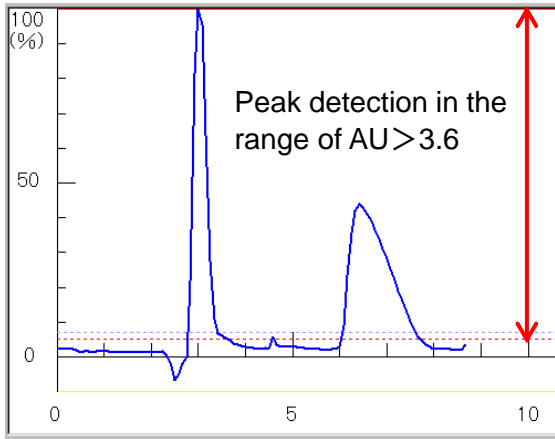


Chromatography with the Use of Solvent Absorbance Cancel Function (Toluene, Acetone, etc.)

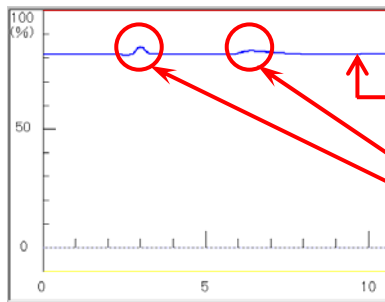
■ Chromatography with 100% toluene is possible on the Yamazen flash system.



Solvent: 100% Toluene
 Wavelength: 254nm
 Detector range: 0.16 AUFS
 (Cancel Toluene's UV absorbance of AU 0.36.)



Toluene's UV absorbance cancelled

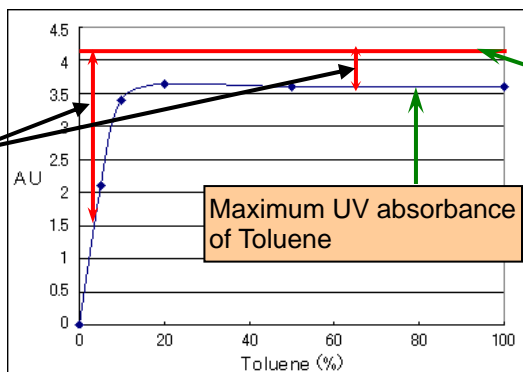


As Toluene has a UV absorbance, the real baseline lies at around AU 3.6.

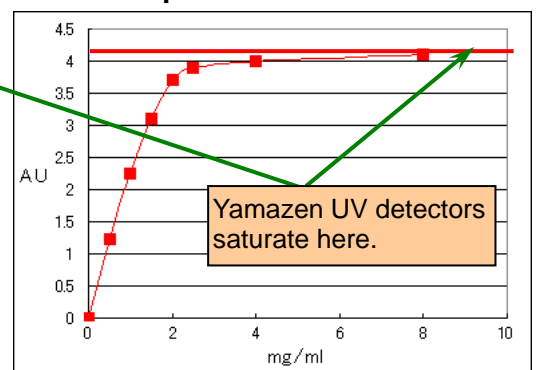
Sample peaks are detected above Toluene baseline.

■ How can the sample peaks be detected above Toluene baseline?

< Toluene's UV absorbance >



< Sample's UV absorbance >



Samples can be detected in this range.

It is a common knowledge that sample peaks will not be detected if Toluene is used as a solvent. The output of the ordinary UV detectors on the market saturate at around AU 2.0. However, Yamazen's UV detectors with a special design of both mechanical and optical systems, are capable of detecting the sample peaks above Toluene's baseline if the sample has a higher UV absorbance than Toluene.