



## Comparison of tap water and pure water by HPLC / UV / OCD

Pure water used for experiments, etc. goes through some process including RO membrane process and is purified by removing dissolved organic matter. In this report, tap water and pure water were separated by size exclusion chromatography, and dissolved organic compounds were detected by UV detection (detection wavelength: 254 nm) and Organic Carbon Detector (OCD). A significant decrease was observed of the UV chromatogram and the OCD chromatogram between tap water and pure water.



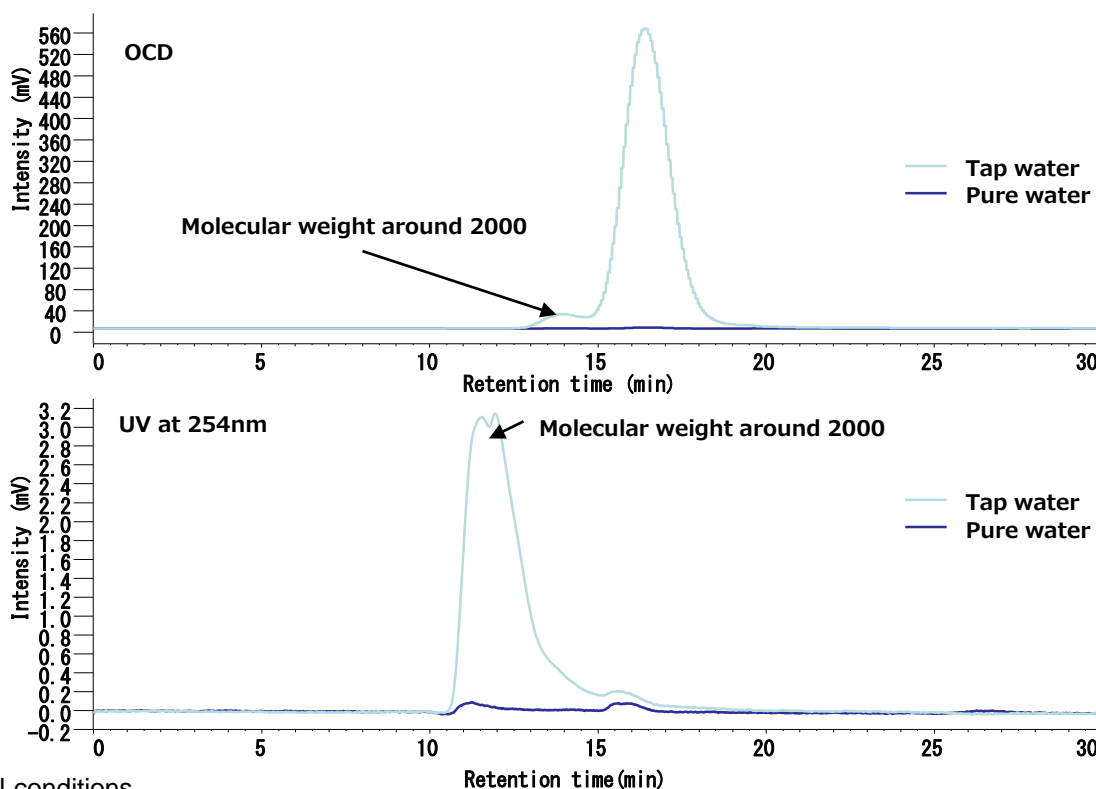
Organic carbon Detector  
TOC M9 series



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### Chromatogram

- ✓ A significant decrease was observed in UV and OCD chromatograms between tap water and pure water.
- ✓ The peaks around 11 min and 14 min OCD detected at UV 254 nm and OCD respectively, are suggested to be humic acid or fulvic acid by molecular weight.



#### Analytical conditions

Eluent : Buffer for HPLC-OCD\*  
 Column : SEC column for HPLC-OCD\*  
 Temperature : 30 °C  
 Flow rate : 1.0 mL/min  
 Injection vol. : 1000 µL  
 Detection : OCD / UV at 254 nm

Molecular weight was estimated by PEG calibration curve.

\*Please contact us for more detail.

<System> Chromaster 5110, 5260 (Including optional syringe and optional rack), 6310, 5420, AID  
 TOC M9 series (Suez, Central Science Co., Ltd. sold in Japan)

NOTE: These data are an example of measurement; the individual vales can not be guaranteed.