

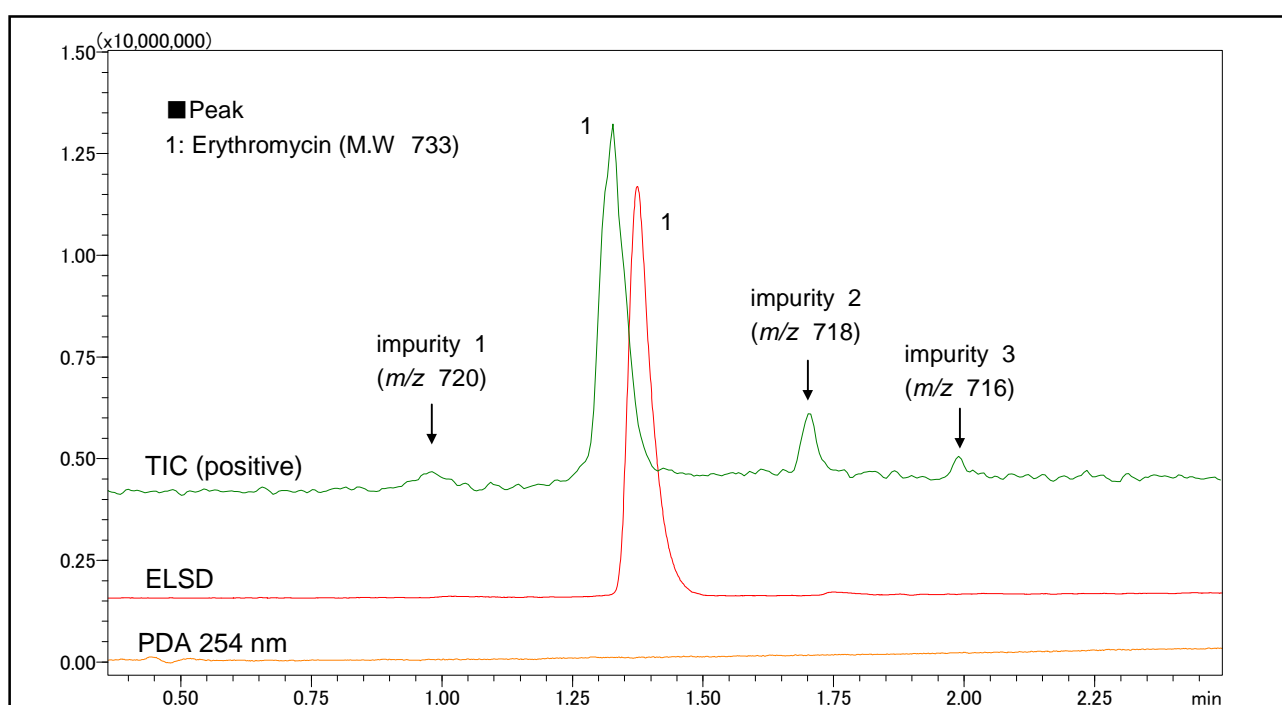
# Application Data Sheet

High Performance Liquid Chromatography

No. 62

## High Speed Analysis of Pharmaceutical Components Using LCMS-2020 (4)

This chromatogram shows results of a high speed analysis of erythromycin, a macrolide antibiotic, by Prominence UFLCXR. Erythromycin can be detected by LCMS and ELSD while UV detection does not provide a signal. For the detection by LCMS-2020 and ELSD, the eluate is split before the two detectors.



### Analysis of Erythromycin

#### [Sample Preparation]

Created standard sample solution of erythromycin (50  $\mu\text{g/mL}$ ).

#### Analytical Conditions

|                    |  |
|--------------------|--|
| Instrument         | : Prominence UFLCXR system+LCMS-2020   |
| Column             | : Shim-pack XR-ODS II (75 mm $\times$ 3.0 mm <i>i.d.</i> )   |
| Mobile Phase       | : A) 0.1% Formic acid - Water<br>B) 0.1% Formic acid - Acetonitrile<br>B conc. ; 20% to 40% (0 to 2.5 min) |
| Flow Rate          | : 1.5 mL/min (PDA) $\rightarrow$ 1.0 mL/min (ELSD) + 0.5 mL/min (MS)                                       |
| Column Temperature | : 40 $^{\circ}\text{C}$  |
| Detection          | : MS; ESI-Positive, ELSD, PDA; 254 nm  |
| Sample Volume      | : 1 $\mu\text{L}$  |