

Supplementary Materials: MC-LR Exposure Leads to Subfertility of Female Mice and Induces Oxidative Stress in Granulosa Cells

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Experimental Section

HPLC-MS/MS Measurement of MC-LR

The HPLC system consisted of one LC-20AB ultra-high pressure gradient pump, a vacuum degasser (DGU-20A5), and an autosampler (SIL-20AC). Column temperature was maintained at 20 °C. The samples were injected onto a 3 × 100-mm Inert Sustain C18 column, 3 μm diameter. The MC-LR was eluted in solution (0.3% HAc: 100% Acetonitrile = 50:50). The flow rate was set at 0.2 mL/min. For each analysis, 1 μL of sample was injected onto the column, and the total analysis time, including the equilibration, was 6.5 min. A LCMS-8040 (Shimadzu Corporation, Kyoto, Japan) was used in the positive electrospray ionization mode. Nitrogen was used as the nebulizing gas, and argon was used as the collision gas. The MC-LR was detected with the mass spectrometer in Multiple Reaction Monitoring (MRM) mode. The MRM transition for MC-LR was as follows: MC-LR (parent ion m/z : 995.7 to product ion m/z : 135.2) (Figure S1).

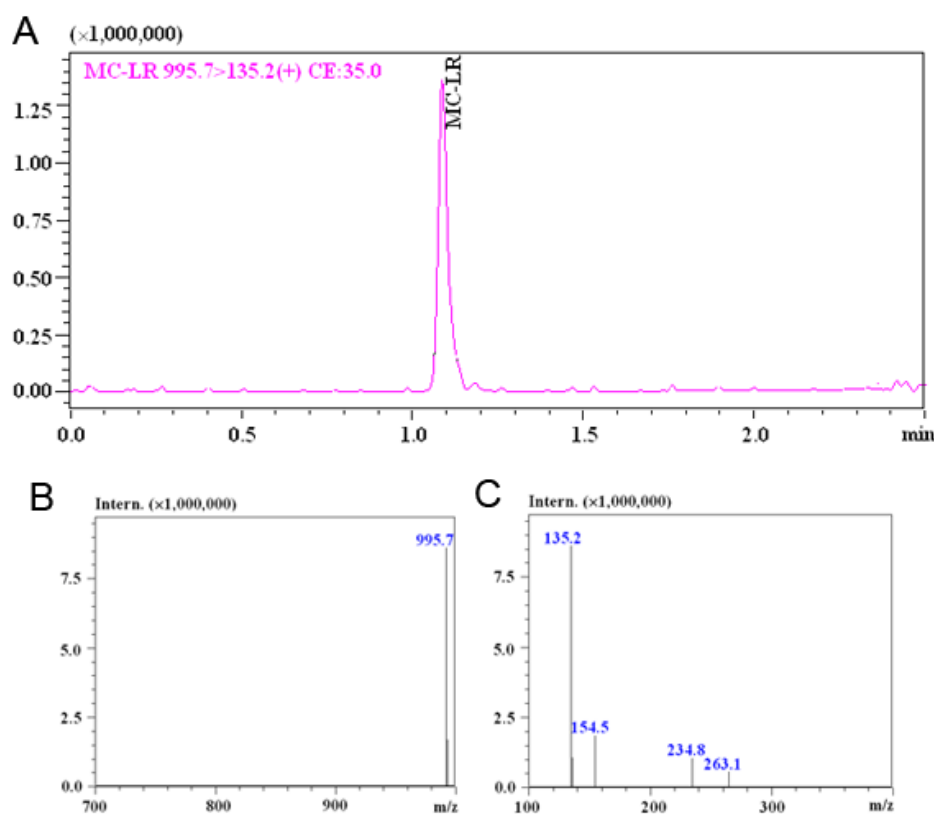


Figure S1. LC-MS/MS detection for MC-LR. (A) MC-LR MRM chromatogram; (B) MC-LR parent ion mass spectrum; (C) MC-LR product ion mass spectrum.