**Supplementary Information**

**Photodegradation of clofibric acid in urban, town, and rural waters: Important roles of dissolved organic matter composition**

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**Text S1** The detailed operational parameters of intermediates identification by GC-MS.

Samples were prepared by the solid phase extraction (SPE) method (with BOJIN® HLB SPE Column) and the silylation method (using chlorotrimethylsilane and pyridine hexamethyldisilazane). An HB-5 MS capillary column (30 m × 250 μm × 0.25 μm film thickness) equipped on the gas chromatograph. The column oven temperature was firstly held at 60 ℃ for 3 min, increased to 250 ℃ at 10 ℃∙min-1, then to 310 ℃ at a rate of 20 ℃∙min-1, and finally maintained for 13 min. Electron impact (EI) mode at 70 eV was used. The spectra were acquired in a scan range of 40-800 m/z. The intermediates analysis were verified from the NIST08 mass spectral library database.

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**Figure S1** Effect of (A) HA, (B) FA and (C) Tyr concentrations on CA photolysis. Experimental conditions: [CA]0 = 0.1 mM, pH = 3.0, 500 W xenon lamp.



**Figure S2** Effect of combined DOM concentration on CA photolysis. Experimental conditions: [CA]0 = 0.1 mM, pH = 3.0. 500 W xenon lamp.



**Figure S3** The GC-MS spectrum of (A) phenol, (B) 4-chlorophenol, (C) 3-chlorophenol, (D) propanoic acid, 2-(4-chlorophenoxy)-2-methyl-, methyl ester.