Supplemental material

Development of preparative and analytical methods of the hop bitter acid oxide fraction and chemical properties of its components

AUTHORSHIP
Yoshimasa Taniguchi[1,*], Yasuko Matsukura[1], Harumi Taniguchi[1], Hideki Koizumi[1], and Mikio Katayama[2]

[1]Central Laboratories for Key Technologies, Research & Development Division, KIRIN Company, Ltd., 1-13-5, Fukuura Kanazawa-ku, Yokohama-shi, Kanagawa 236-0004, Japan.
[2]Research Laboratories for Health Science & Food Technologies, Research & Development Division, KIRIN Company, Ltd., 1-13-5, Fukuura Kanazawa-ku, Yokohama-shi, Kanagawa 236-0004, Japan.

*; Author to whom correspondence should be addressed (telephone +81-45-330-9007; fax +81-45-782-3657; e-mail Yoshimasa_Taniguchi@kirin.co.jp).

Contents

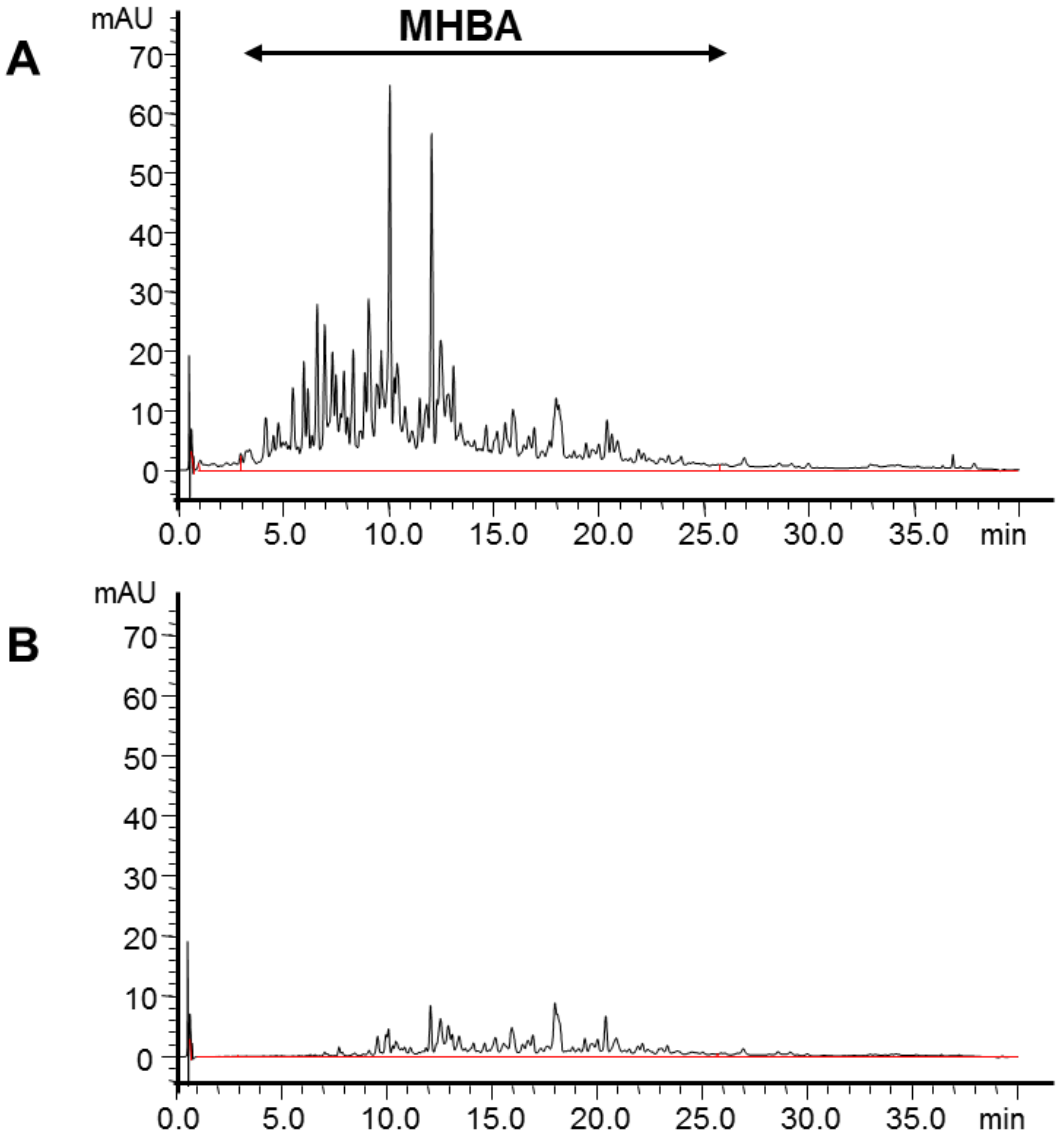

Fig. S1. HPLC chromatograms of the constituents extractable in (A) CH_2Cl_2 and (B) isooctane from the acidic aqueous solution of the water extract of stored hops.

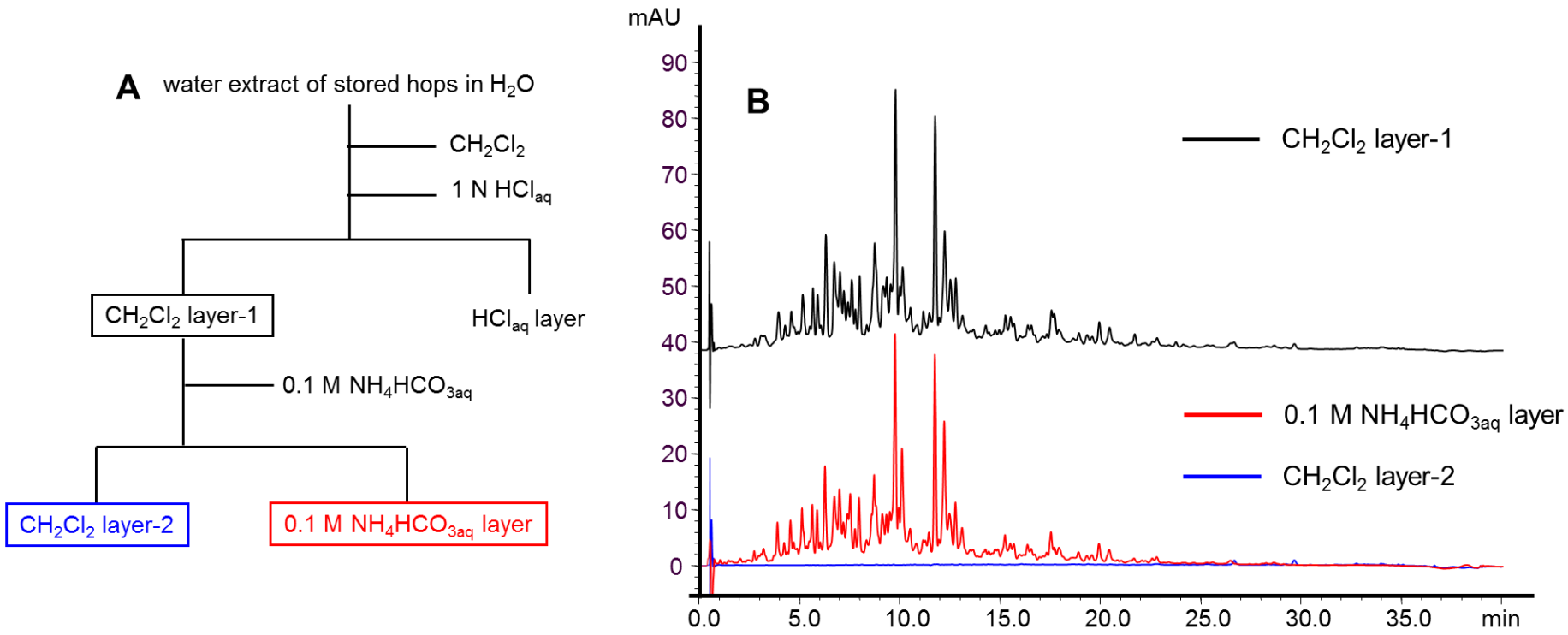

Fig. S2. A: Scheme of acid-base partition experiment of the MHBA components. B: HPLC chromatograms of the CH_2Cl_2 layer-1 (partitioned with HCl_{aq}) (black line), CH_2Cl_2 layer-2 (partitioned with 0.1 M NH_4HCO_{3aq}) (blue line), and 0.1 M NH_4HCO_{3aq} layer (red line).

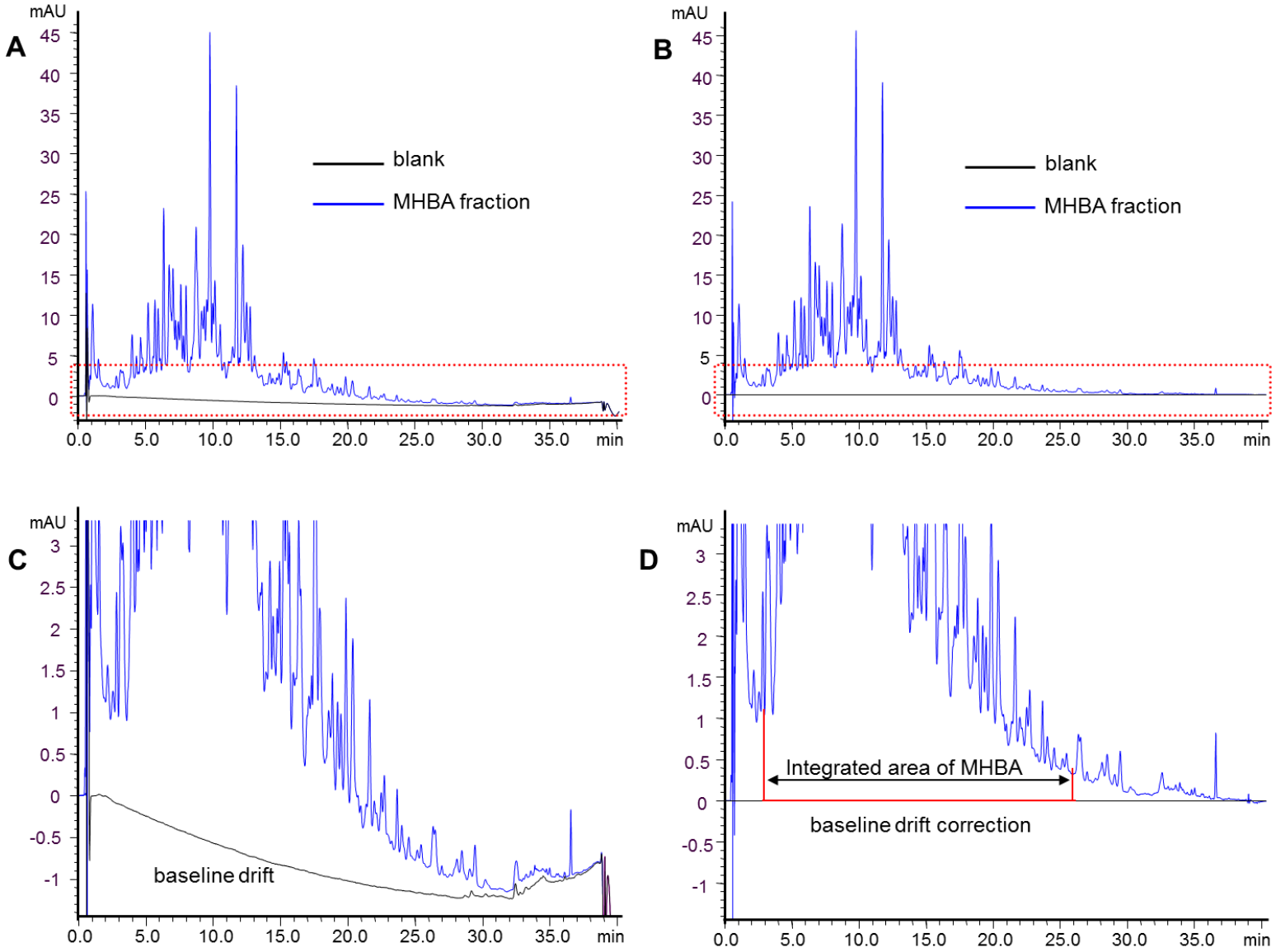

Fig. S3. HPLC chromatograms of the blank (H_2O) and MHBA fraction (A) before and (B) after baseline drift correction. HPLC chromatograms of (C) and (D) correspond to the enlarged views of the enclosed regions of (A) and (B), respectively. Integrated peak area of whole MHBA is enclosed by a red line in (D).

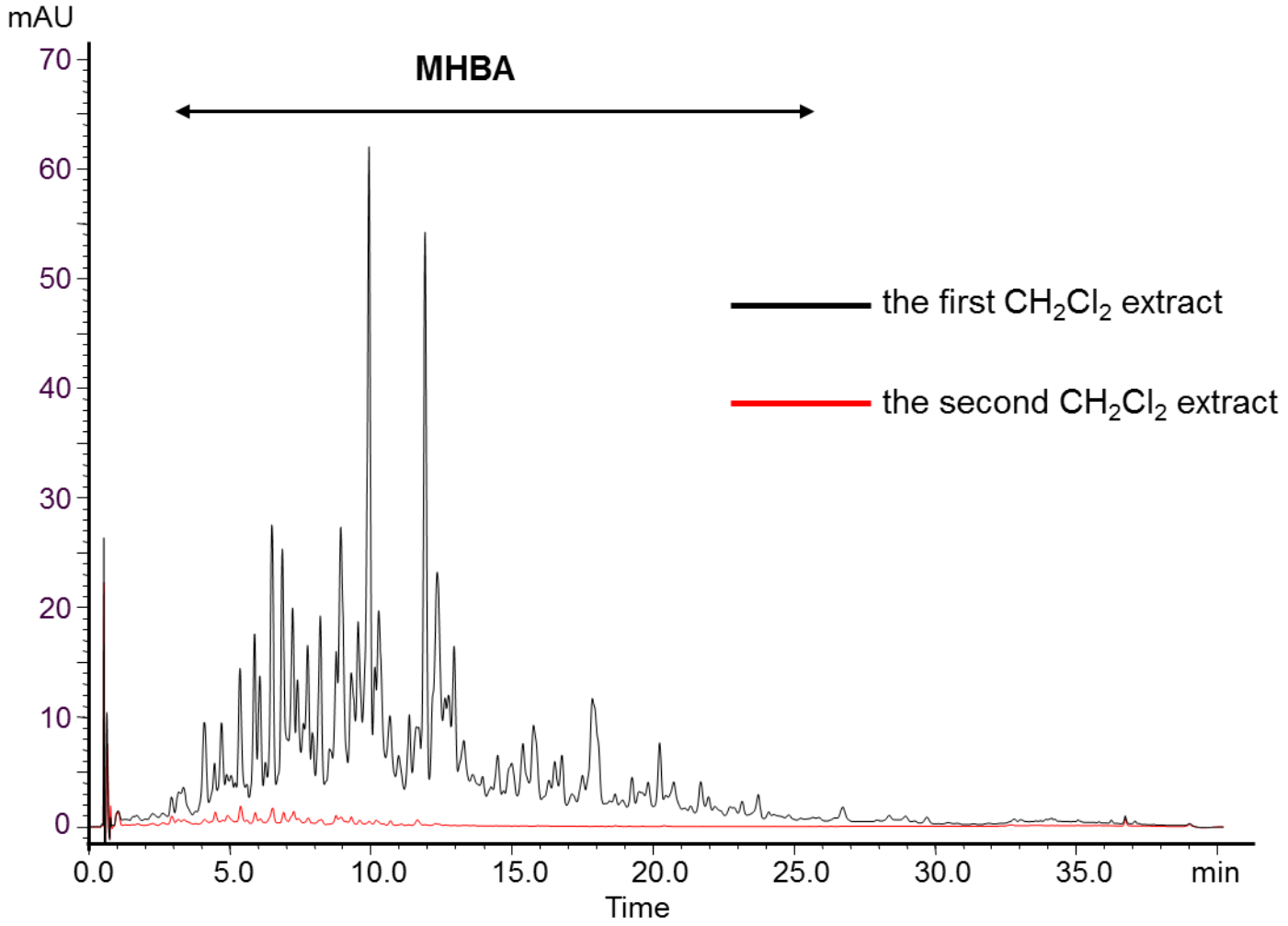

Fig. S4. HPLC chromatograms of the first (black line) and second (red line) CH_2Cl_2 extract from the beverage containing MHBA.