

Metabolism and Distribution of Benzo[*a*]pyrene-7,8-dione (B[*a*]P-7,8-dione) in Human Lung Cells by Liquid Chromatography Tandem Mass Spectrometry: Detection of an Adenine B[*a*]P-7,8-dione Adduct.

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Supporting Information Available

Distribution of 1,3-³H₂-B[*a*]P-7,8-dione radioactivity in three human lung cell lines (Figure S-1).

HPLC radio-chromatograms and UV chromatograms (348 nm) of extracts from organic phase of media in H358 cells (Figure S-2) and HBEC-KT cells (Figure S-3).

Figure S-1. Distribution of 2 μM 1,3-³H₂-B[*a*]P-7,8-dione in A549 (A), H358 (B) and HBEC-KT (C) cells. (◆: aqueous phase of media; ■: organic phase of media; ▲: cell lysate pellets; *: aqueous phase of cell lysate supernatants; ●: organic phase of cell lysate supernatants.) A549, H358 and HBEC-KT cells (5×10^6) were incubated with 1,3-³H₂-B[*a*]P-7,8-dione (2 μM, 1

$\times 10^5$ cpm/nmol, 0.2 % DMSO) in HBSS buffer containing 1 mM sodium pyruvate. The culture media and the cells were collected separately over time and were extracted with ethyl acetate before counting. The mean \pm SD for triplicate determinations are shown.

Figure S-2. HPLC radio-chromatogram (A) and UV chromatogram (348 nm) (B) of extracts from organic phase of media in H358 cells at 24h. H358 cells (5×10^6) were treated with [1,3- ^3H]-B[a]P-7,8-dione (2 μM , 1×10^5 cpm/nmol, 0.2 % DMSO) in the same manner as described in the legend of Figure 1. The culture media were collected at 24 h, and subsequently acidified with 0.1% formic acid before extraction with ethyl acetate. The extracts were analyzed on a HPLC-UV-RAM.

Figure S-3. HPLC radio-chromatogram (A) and UV chromatogram (348 nm) (B) of extracts from organic phase of media in HBEC-KT cells at 24h. HBEC-KT cells (5×10^6) were treated with [1,3- ^3H]-B[a]P-7,8-dione (2 μM , 1×10^5 cpm/nmol, 0.2 % DMSO) in the same manner as described in the legend of Figure 1. The culture media were collected at 24 h, and subsequently acidified with 0.1% formic acid before extraction with ethyl acetate. The extracts were analyzed on a HPLC-UV-RAM.

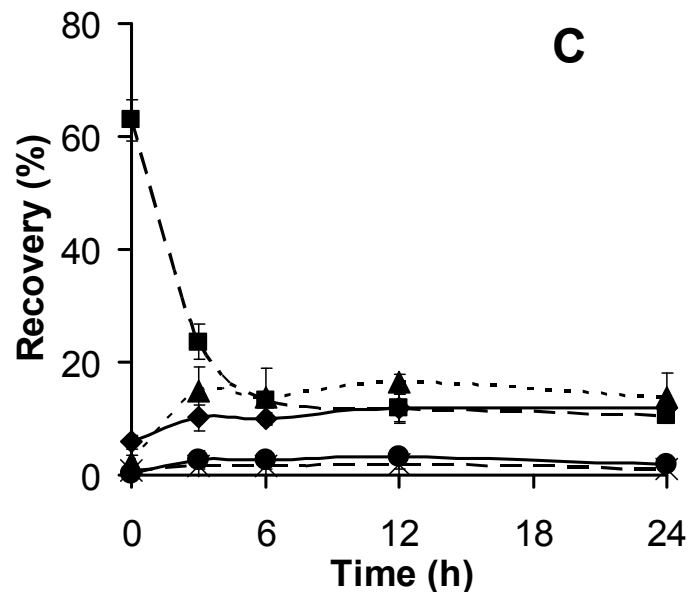
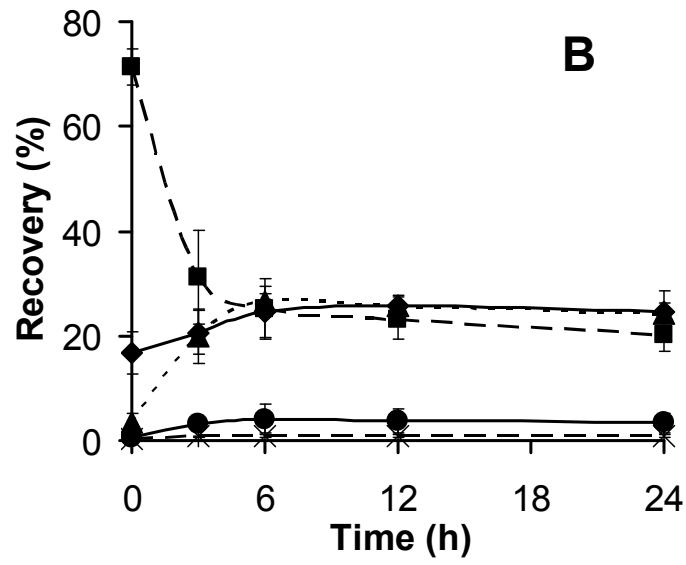
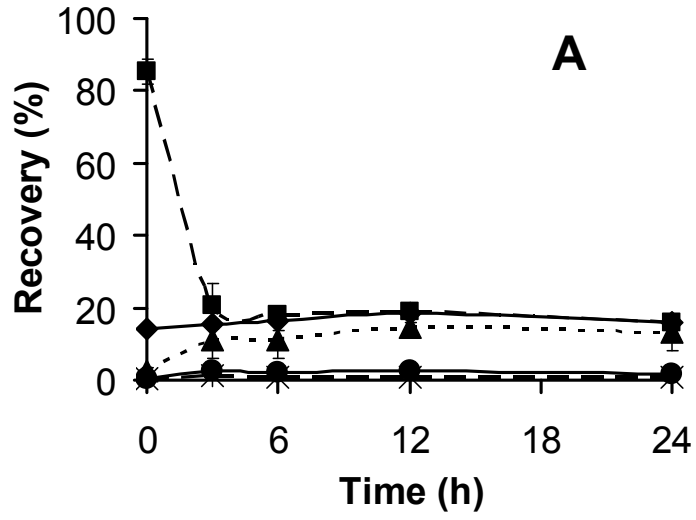


Figure S-1.

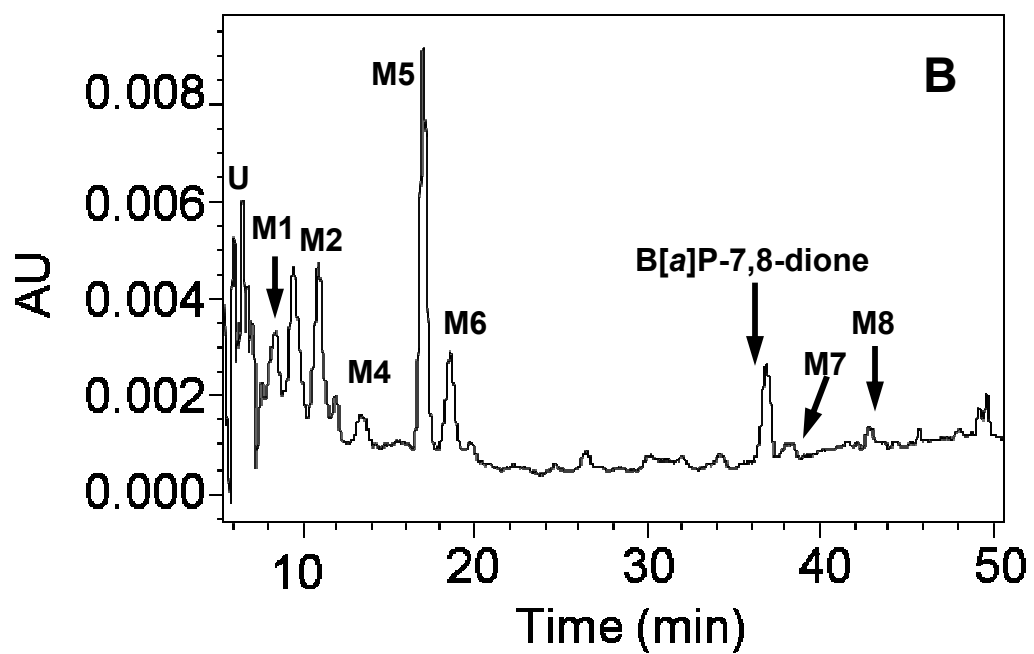
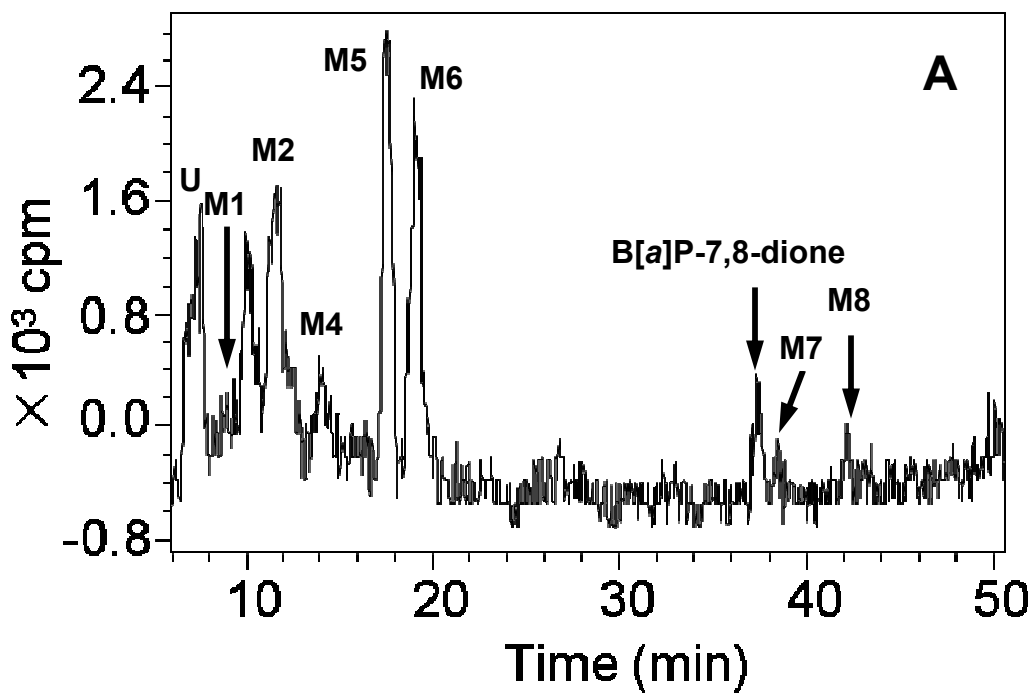


Figure S-2.

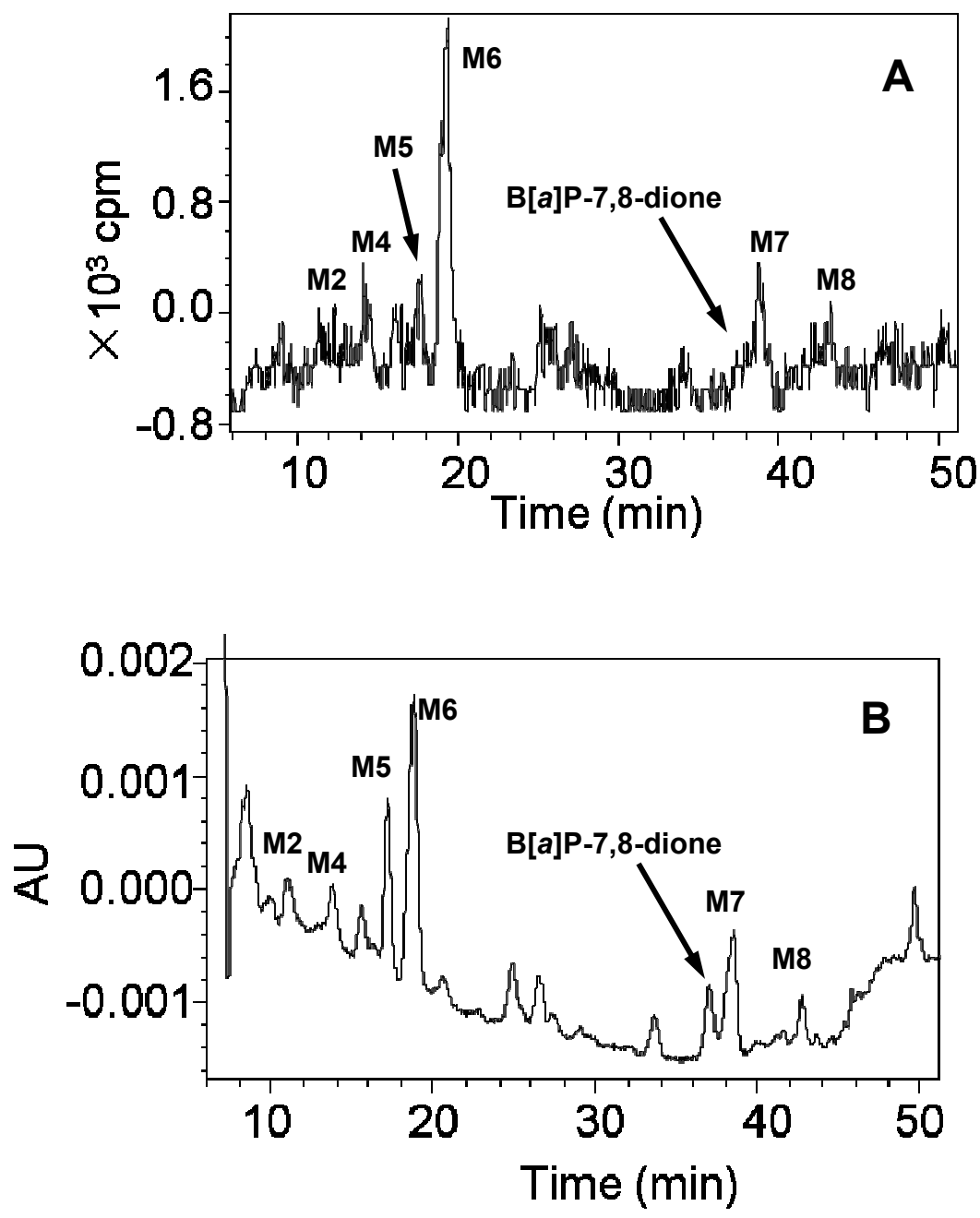


Figure S-3.