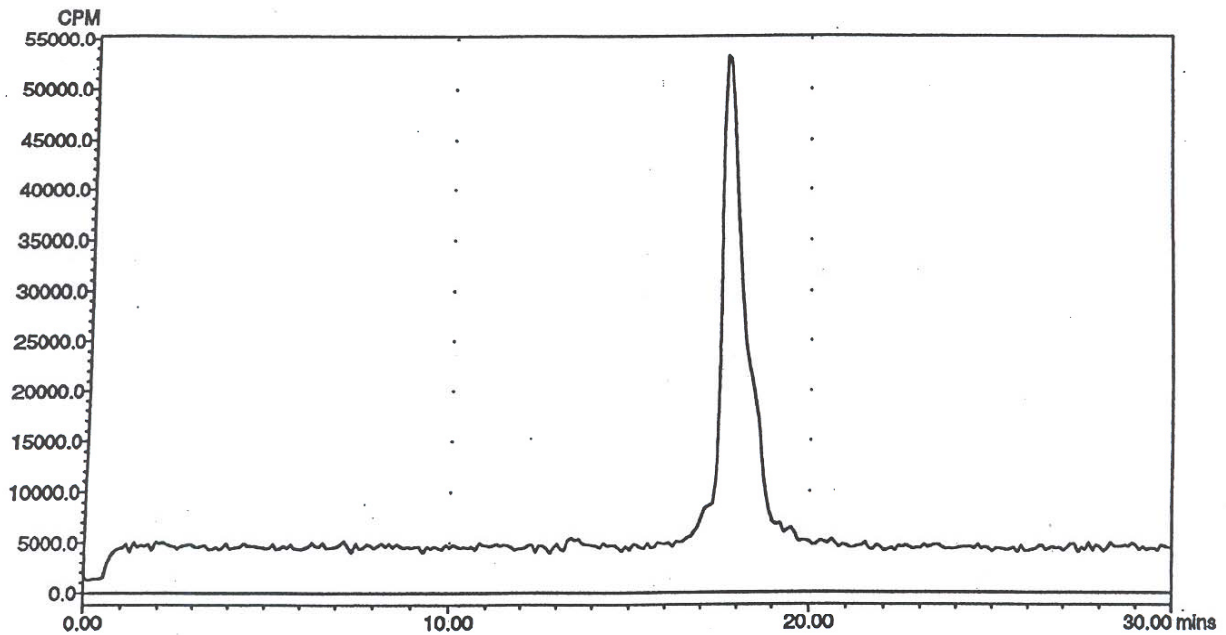


**Metabolism, pharmacokinetics, tissue distribution, and stability studies of the prodrug analog of an anti-HBV dinucleoside phosphorothioate**

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JEC, RKP, SP, RPI: Spring Bank Pharmaceuticals, Inc., S-7, 113 Cedar Street, Milford, MA 01757  
KGO, CEG, JCM: Toxicology & Pharmacokinetics, SRI International, Menlo Park, CA 94025  
JM: Genzyme Corporation, Marlborough, Massachusetts



Regions: <sup>14</sup>C      Detector: FSA

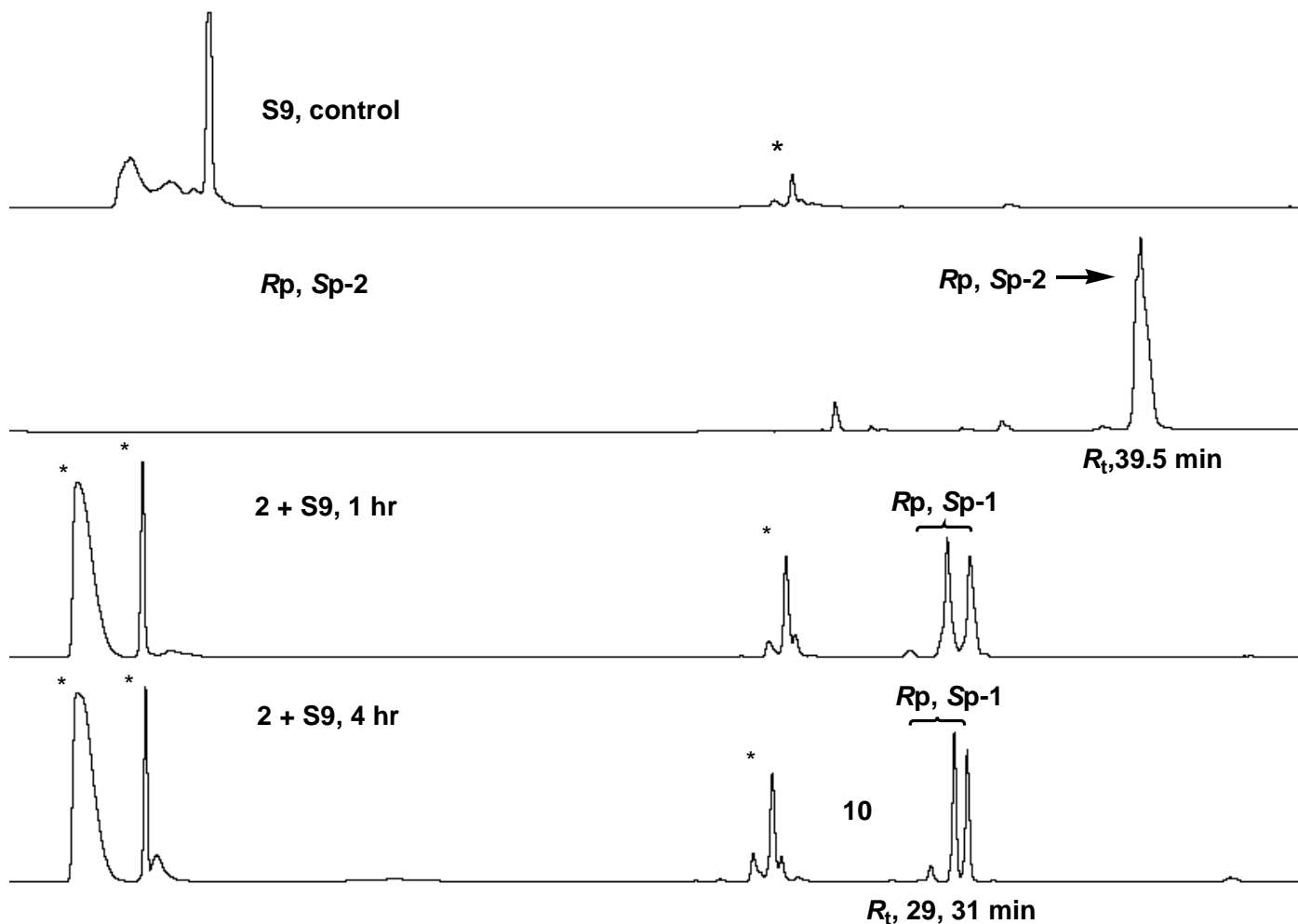
Name	Start (mins)	End (mins)	Retention (mins)	Height (CPM)	Area (CPM)	%ROI (%)	%Total (%)
No ROIs allocated.							
0 Peaks					0.0	100.00	0.00

**Supplemental Fig. 1.** Radiochromatogram of <sup>35</sup>S-2 used in the studies. Radio HPLC was carried out using a Waters Nova Pak C18 column (4 μM, 4.6 X 250 mm), using an elution gradient of A to B consisting of 0.1 M ammonium acetate (A) and 0.1 M ammonium acetate:acetonitrile (20:80) (B) over 30 min at a flow rate of 1.5 ml/min. Detection of UV-absorbing compounds were done by UV detector at 254 nm and that of radioactive compounds by Radiomatic 610 TR detector.

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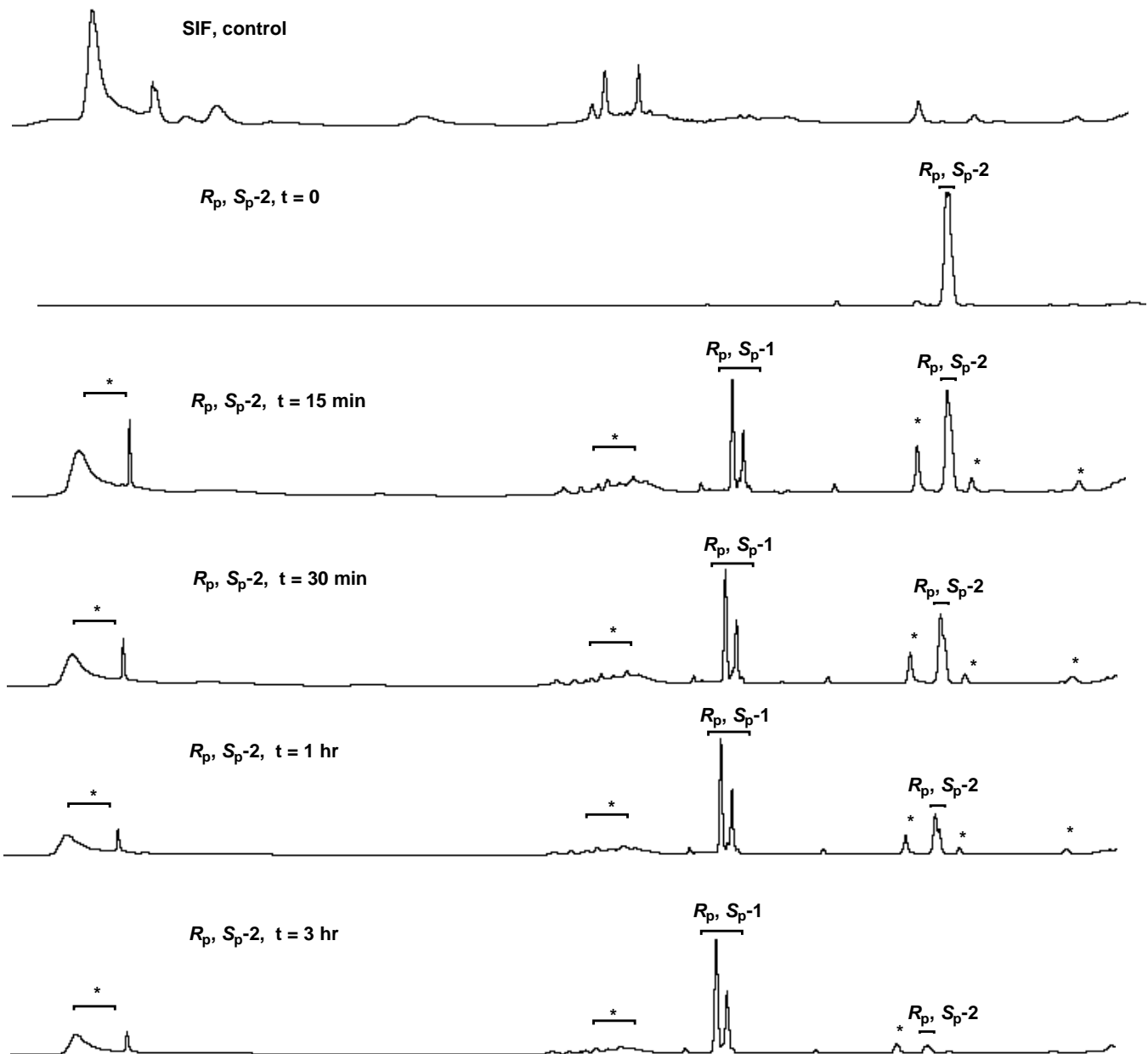


**Supplemental Fig. 2.** Representative HPLC profile at different time points of aliquots from the incubation of **Rp, Sp-2** with human liver S9 fractions. The peaks with asterisks correspond to the components from S9 fraction.

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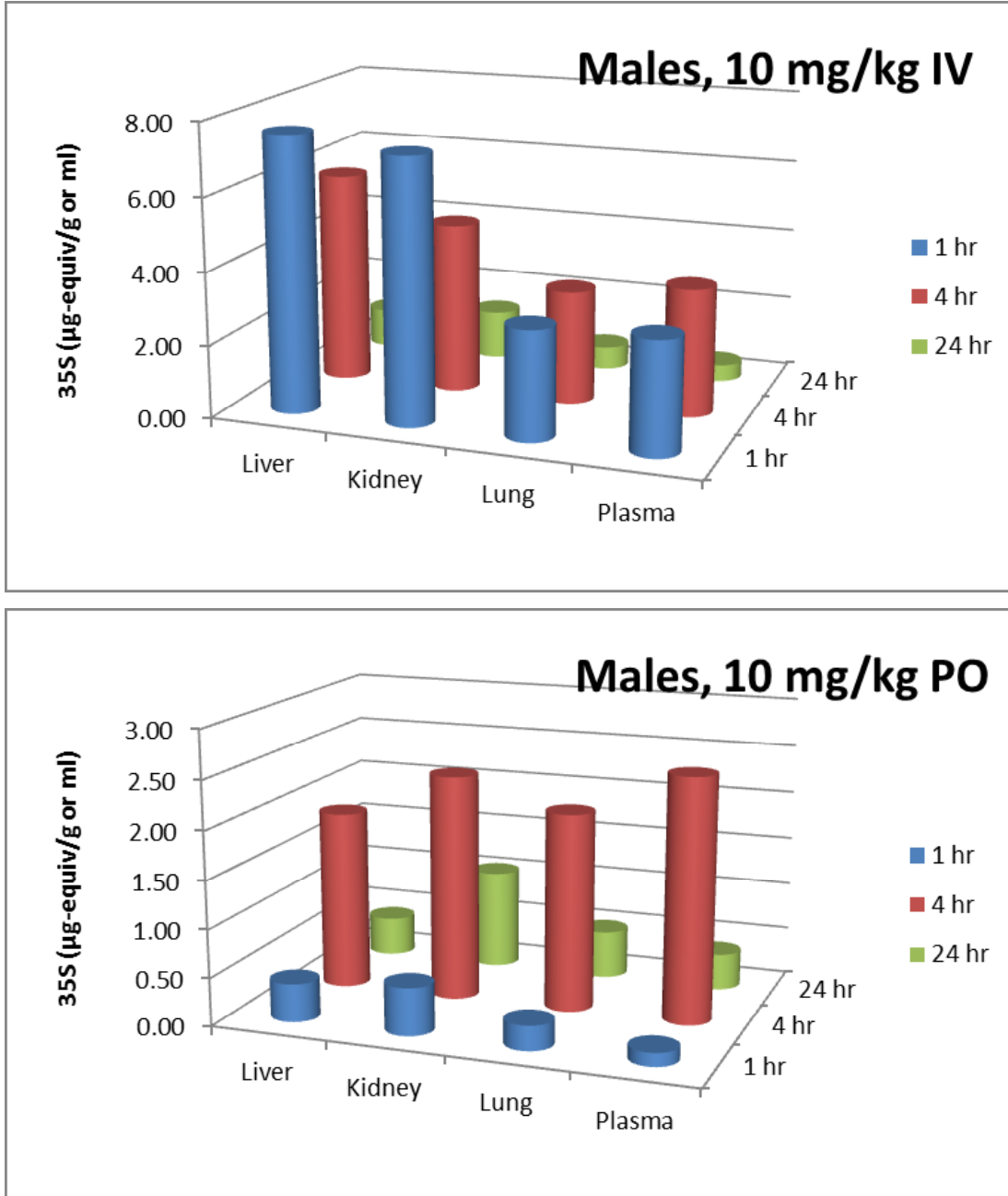


**Supplemental Fig. 3.** Time-course HPLC profiles of incubates of  $R_p, S_p-2$  showing the formation of  $R_p, S_p-1$  in simulated intestinal fluid. The peaks with asterisks correspond to the components from SIF.

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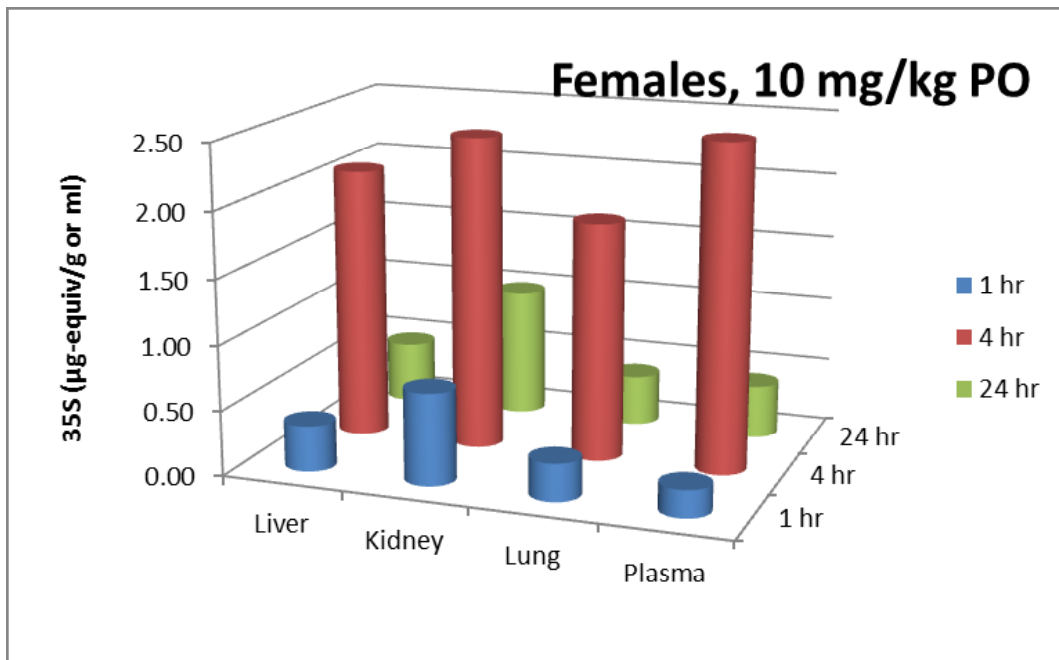
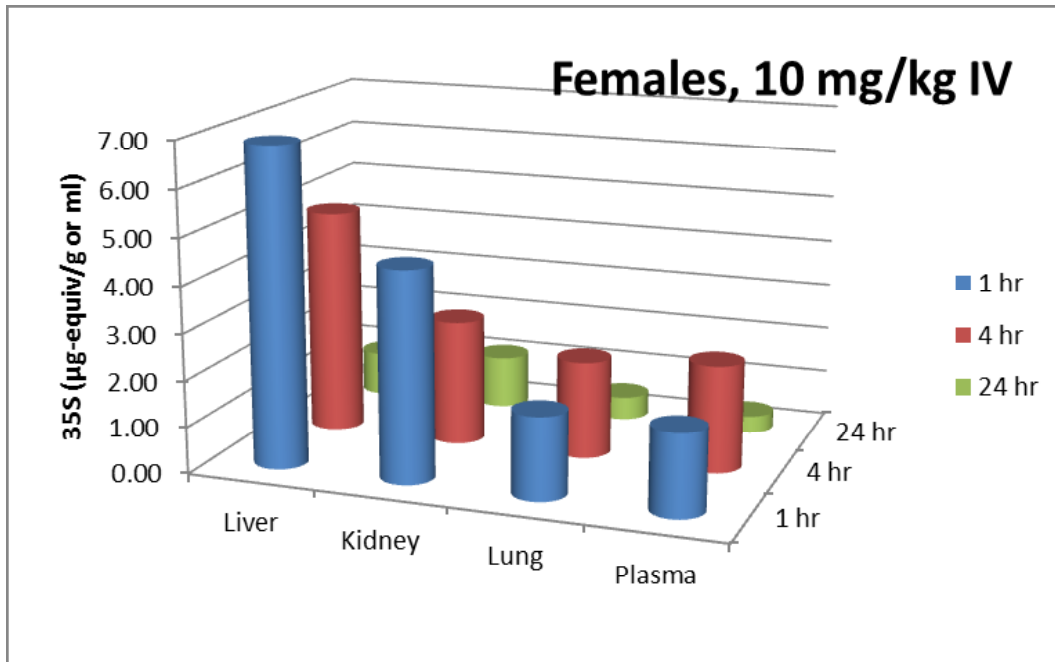
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**Supplemental Fig. 4.** Concentration of radioactivity after a single i.v. or p.o. dose of <sup>35</sup>S-2 in major tissues (µg-equiv/ml plasma or g tissue) from male rats at 1, 4 and 24 h after dose administration. Data is presented as mean values derived at each time point from nine rats.

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**Supplemental Fig. 5.** Concentration of radioactivity after a single i.v. or p.o. dose of <sup>35</sup>S-2 in major tissues (µg-equiv/ml plasma or g tissue) from female rats at 1, 4 and 24 h after dose administration. Data is presented as mean values derived at each time point from nine rats.