

Supporting Information

Szabo et al. 10.1073/pnas.1306241110

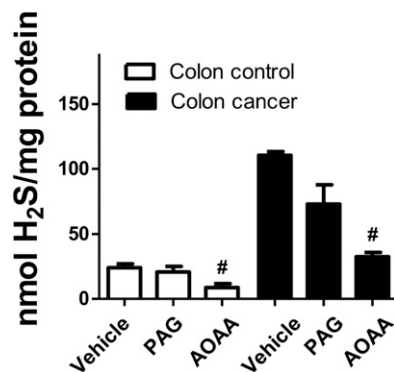


Fig. S1. Effect of the CBS inhibitor AOAA (1 mM) and the CSE inhibitor PAG (3 mM) on H₂S production in homogenates of a colorectal cancer and patient-matched normal colonic tissue. H₂S production was measured in homogenates of a human colorectal cancer specimen by the methylene blue method. H₂S production was stimulated in tissue or cell lysates by incubation at 37 °C (30 min) in presence of the L-cysteine (3 mM). H₂S production was significantly higher in colon cancer tissues, compared with their corresponding controls. AOAA (1 mM) attenuated the H₂S-producing activity of the tissue homogenates ([#]*P* < 0.05), whereas PAG (3 mM) had no significant effect. Data represent mean ± SEM of *n* = 3 determinations.

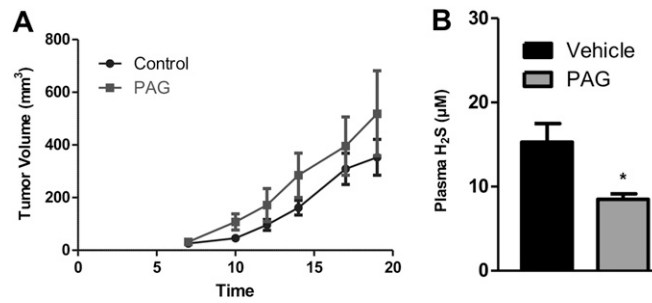


Fig. S7. Pharmacological inhibition of CSE by PAG does not inhibit colon cancer growth in vivo. Effect of PAG treatment (50 mg/kg·d⁻¹) on (A) tumor volume and (B) plasma H₂S levels in Nu/nu Balb/C female mice (8–10 wk) injected s.c. in the right and left dorsum (10⁶ cells per side with HCT116 cells). Consistent with the role of CSE in contributing to circulating H₂S levels (1), PAG attenuated systemic H₂S levels (B), but it failed to affect tumor growth (A). Data represent mean ± SEM of *n* = 6 animals per group.

1. Yang G, et al. (2008) H₂S as a physiologic vasorelaxant: Hypertension in mice with deletion of cystathionine gamma-lyase. *Science* 322(5901):587–590.

Table S1. Clinicopathologic information of the human colon cancer samples used in the current study

Patient sample	Age	Sex	Stage
CN052710	66	F	Normal margin of stage III
CN051310	60	M	Normal margin of stage III
CN041411	63	F	Normal margin of adenoma
CT121009	47	F	Chronic inflammation
CT121509	30	M	Stage II
CT041411	63	F	Adenoma
CN/CT060710	78	F	Stage II
CN/CT060310	88	F	Stage II
CN/CT071210	75	M	Stage II
CN/CT052912#24	28	M	Stage III