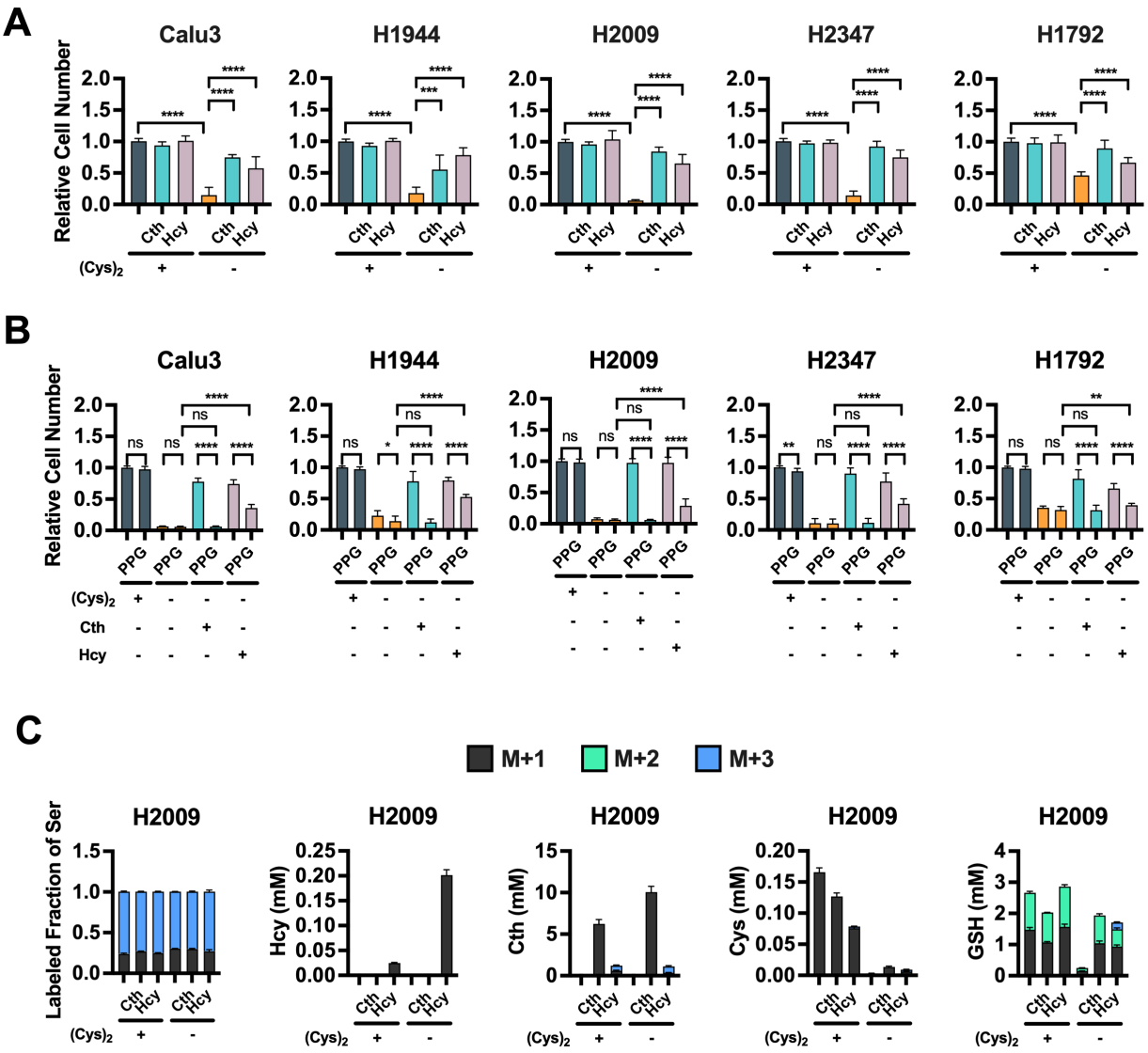
A
Calu3
H1944
H2009
H2347
H1792
Relative Cell Number
Cth
Hcy
(Cys)2
B
PPG
Cth
Hcy
C
M+1
M+2
M+3
Labeled Fraction of Ser
Hcy (mM)
Cth (mM)
Cys (mM)
GSH (mM)

Supplementary Figure S2.

Cystathionine and homocysteine rescue NSCLC cell viability under cystine starvation (related to Fig. 1). **A,** Measurement of relative NSCLC cell number under cystine-replete (200 μM) or cystine-starved (0 μM) conditions supplemented with 1 mM cystathionine or 1 mM homocysteine. **B,** Measurement of relative NSCLC cell number under cystine-starved condition treated with cystathionine or homocysteine in the presence of absence of 100 μM of propargylglycine. Relative cell number was determined by crystal violet staining, followed by normalization to cystine-replete, untreated conditions. For **A** and **B**, data are presented as mean ± SD. **C,** Labeled fraction of serine and concentration of homocysteine, cystathionine, cysteine, and glutathione after 24 h $^{13}C_3$-serine labeling in H2009 under cystine-replete (200 μM) or cystine-starved (0 μM) condition supplemented with 1 mM cystathionine or 1 mM homocysteine. N=3 biological replicates for each condition. *p < 0.05, **p < 0.01, ***p < 0.001, and ****p < 0.0001. Cys, cysteine; $(Cys)_2$, cystine; Cth, cystathionine; Hcy, homocysteine; PPG, propargylglycine; GSH, glutathione; Ser, serine.