Sample name	Cnorminal	peak area	Mean	SD	RSD	Recovery	Mean
	(µM)	of NBDSH	value				recovery
blk RP1	-	938.486	912.454	-	-	-	
blk RP2		886.422				-	-
HS100n-1		583.538	590 444			-	
HS100n-2		577.349	580.444	-	-	-	-
RP HS100n-1	0.1	1248.900				57.96	
RP HS100n-2		1344.770	1297.609	47.954	3.70	74.48	66.36
RP HS100n-3		1299.158				66.62	
HS1µ-1		5295.928	5079.760	-	-	-	
HS1µ-2		4863.593				-	-
RP HS1µ-1	1	1530.888				12.17	
RP HS1µ-2		1311.671	1402.193	114.485	8.16	7.86	9.64
RP HS1µ-3		1364.021				8.89	
HS 10µ-1		48160.871	45101.000			-	
HS 10µ-2		46221.168	47191.020	-	-	-	-
RP HS10µ-1	10	3483.301				5.45	
RP HS10µ-2		3507.145	3568.925	128.212	3.59	5.50	5.63
RP HS10µ-3		3716.330				5.94	

Table S1 Recovery of different concentration of H₂S in rat plasma by reaction with 2mM NBDOEt

Note: blk RP, blank rat plasma sample; HS $100n/1\mu/10\mu$, aqueous standard solution of

H₂S with a concentration of 100nM, 1μ M or 10μ M; RP HS100n/ 1μ / 10μ , H₂S spiked rat plasma sample with a concentration of 100nM, 1μ M or 10μ M.

The recovery of H₂S from rat plasma was calculated by subtracting the mean NBDSH response of the blank plasma samples from the response of each H₂S spiked plasma sample and then dividing by the mean NBDSH response of corresponding H₂S aqueous standard solutions.