

Supplemental data

A protocol provided by Pierce, in which DS-PDPH is reacted with DTT to yield pyridine-2-thione was used to determine the number of PDPH molecules added to oxidized DS. The following equation was used to determine the moles of PDPH present on purified DS-PDPH.

$$\frac{\Delta A_{343nm}}{8080M^{-1}cm^{-1}} * \frac{MW_{DS}}{mg/mL_{DS}} = moles_{PDPH}$$

The extinction coefficient of pyridine-2-thione at 343 nm was provided by Pierce and the molecular weight of DS was 41,000Da. **Figure S1** shows the absorbance values of DS-PDPH before and after incubating with DTT for 15 min. The ΔA_{343nm} corresponds to 1.1 moles PDPH per mole DS.

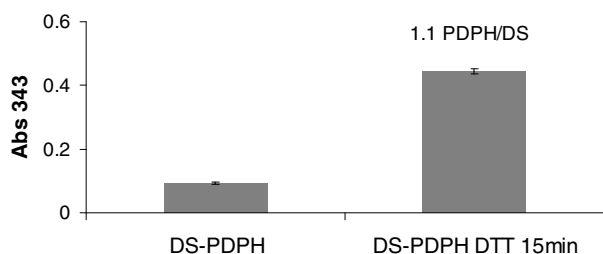


Figure S1. DS-PDPH conjugation characterization. DS-PDPH at 1.6 mg/mL was reacted with DTT 15 mg/mL for 15 minutes. The change in absorbance corresponds to the production of pyridine-2-thione and corresponds to 1.1 moles of PDPH per mole of DS.