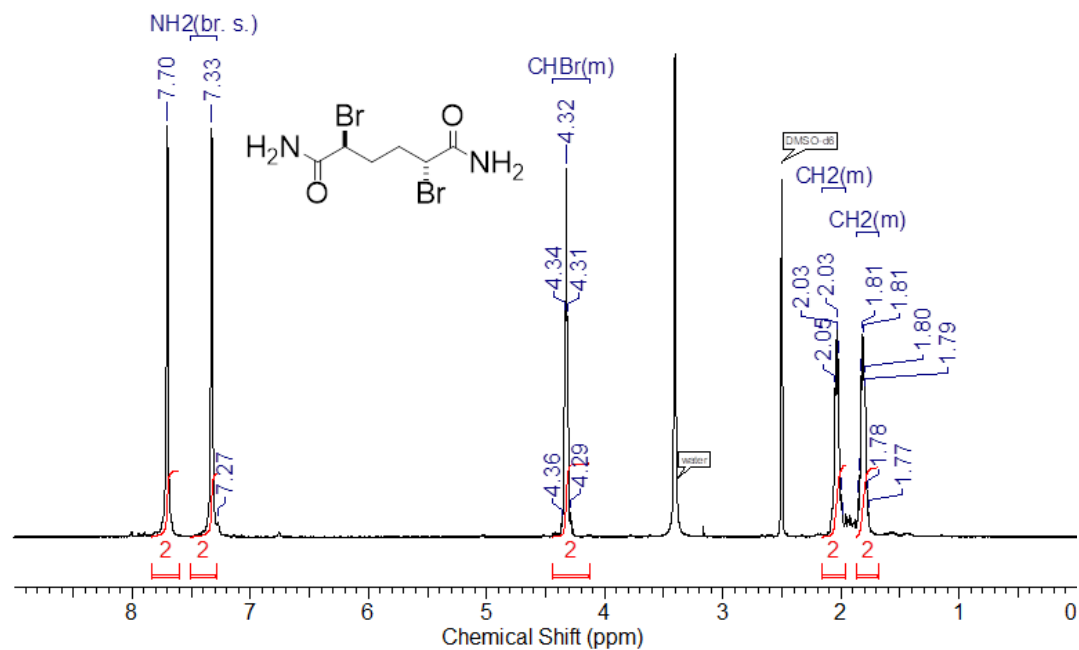


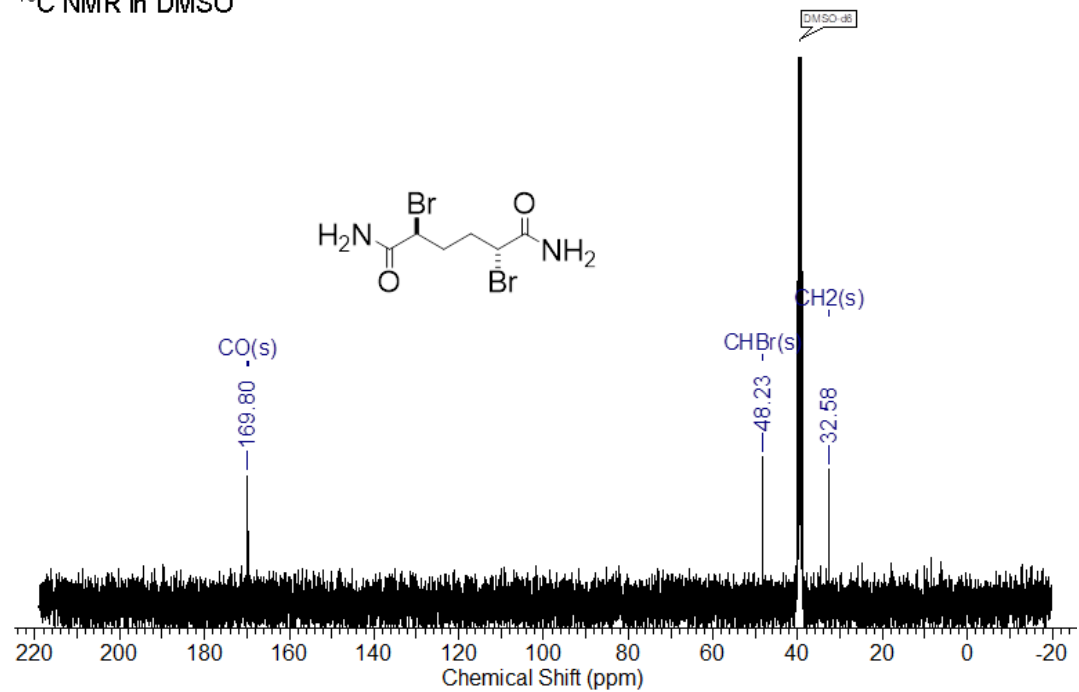
**Supplemental Methods S1. NMR spectra of bisalkylating agents used to introduce dehydro amino acids into proteins. Related to Figures 3 and 4.**

**2,5-Dibromohexanediamide, DBHDA**

<sup>1</sup>H NMR in DMSO

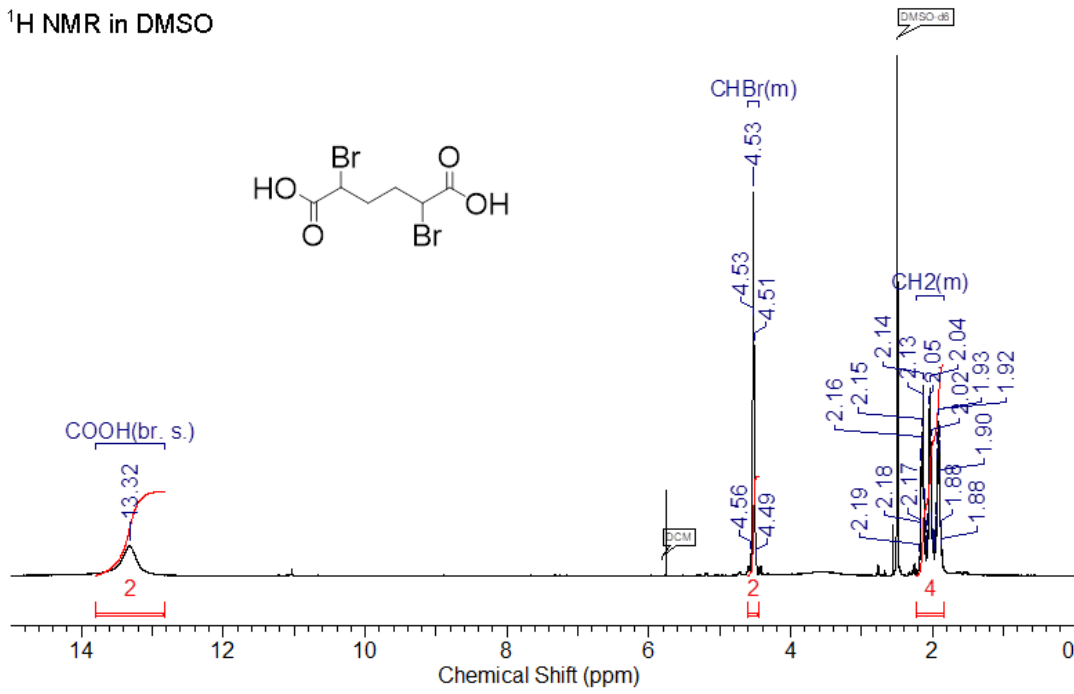


<sup>13</sup>C NMR in DMSO

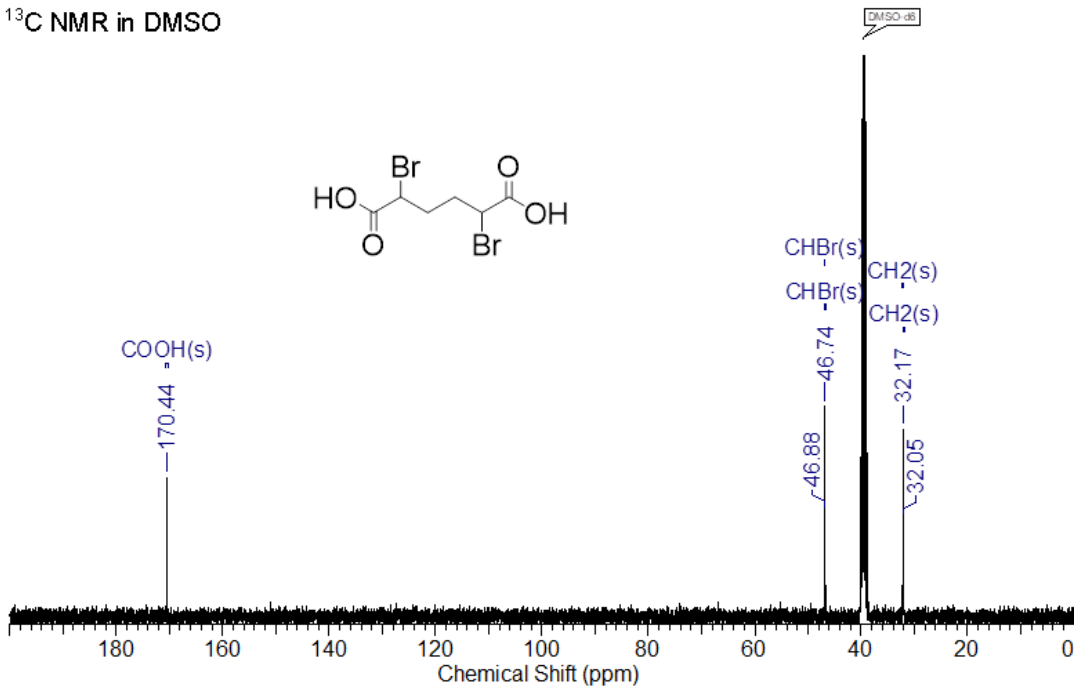


2,5-Dibromohexanedioic acid, DBHDAc

$^1\text{H}$  NMR in DMSO

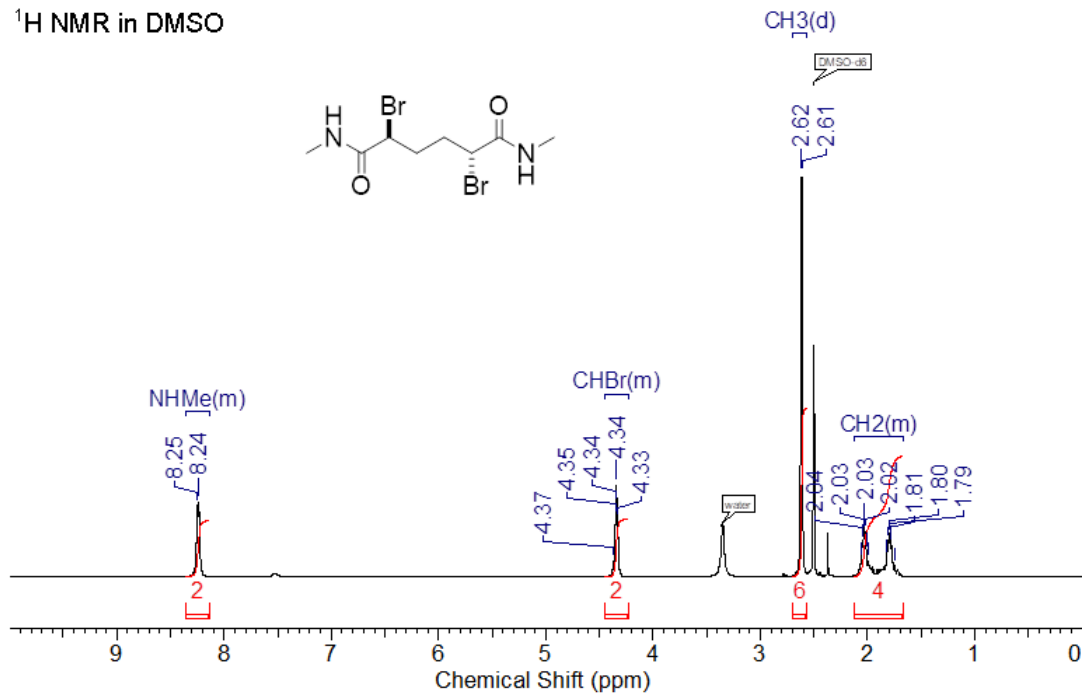


$^{13}\text{C}$  NMR in DMSO

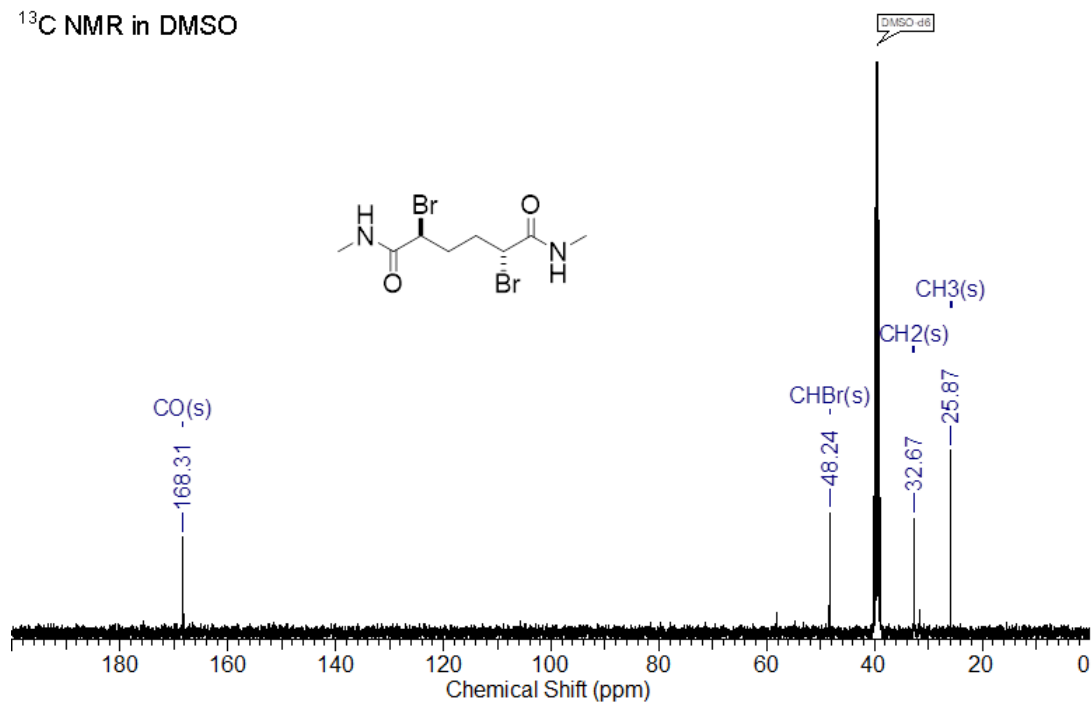


2,5-Dibromo-N,N'-dimethylhexanediamide, DBDMet

$^1\text{H}$  NMR in DMSO

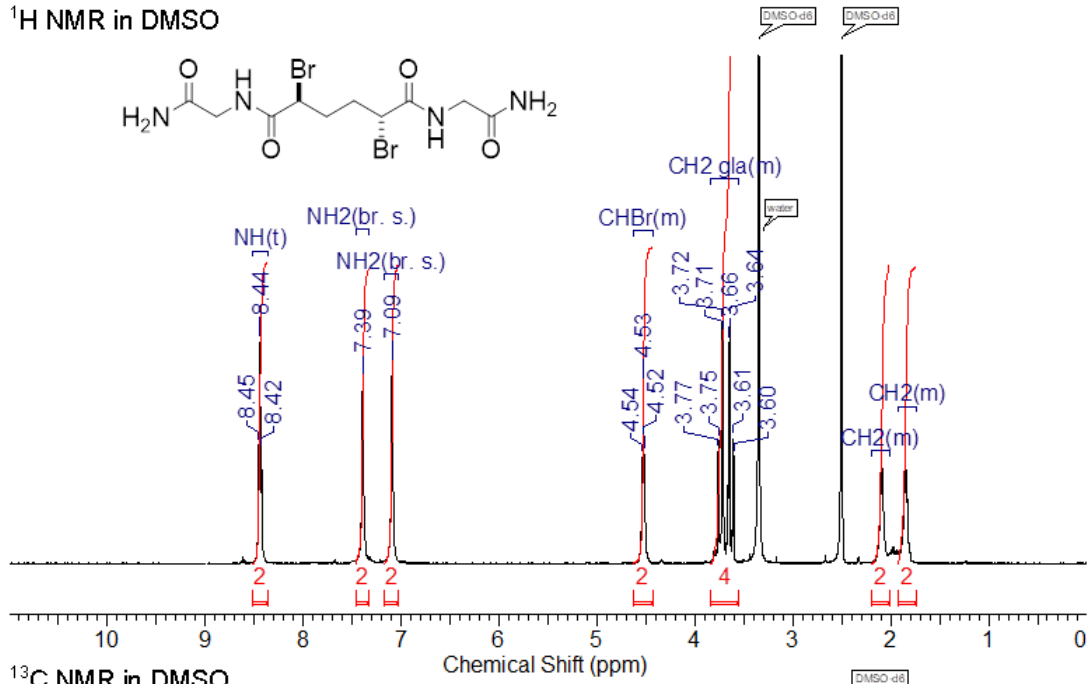


$^{13}\text{C}$  NMR in DMSO

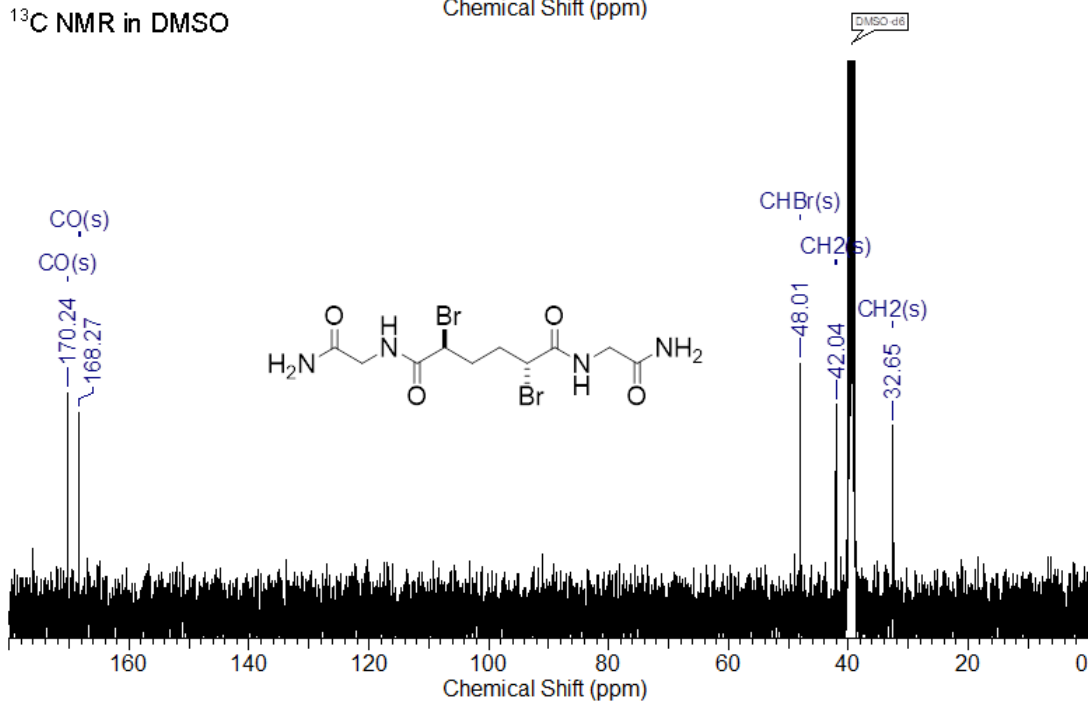


*meso*-*N,N*'-bis(2-amino-2-oxoethyl)-2,5-dibromohexanediamide, DBDGla

<sup>1</sup>H NMR in DMSO



<sup>13</sup>C NMR in DMSO



({(meso)-2,5-dibromo-6-[(carboxymethyl)amino]-6-oxohexanoyl]amino)acetic acid, DBDGly  
<sup>1</sup>H NMR in DMSO

