



Fig. S3. Mass spectrometry of reduced and oxidized BST2(47–154). (A) Reduced and (B) oxidized BST2(47–154) were desalted for electrospray ionization mass spectrometry using a C18 Ziptip (Millipore) and analyzed on a Quattro-II mass spectrometer (Micromass, Inc.). Data were acquired with a cone voltage of 50 eV, a spray voltage of 2.8 kV, and scanning from 800 to 1,400 m/z in 4 s. Spectra were combined, and the multiply charged molecular ions were deconvoluted into a molecular-mass spectrum by using MaxEnt software (Micromass, Inc.). The mass of the reduced species corresponded to a BST2(47–154) monomer ($MW_{\text{obs}} = 12,774.6$ g/mol, $MW_{\text{calc}} = 12,775.4$ g/mol), indicating no disulfide formation in the presence of reductant. In contrast, the majority of BST2(47–154) formed a disulfide crosslinked dimer in the absence of TCEP ($MW_{\text{obs}} = 25,544.0$ g/mol, $MW_{\text{calc}} = 25,544.8$ g/mol, assuming formation of three disulfide bonds).