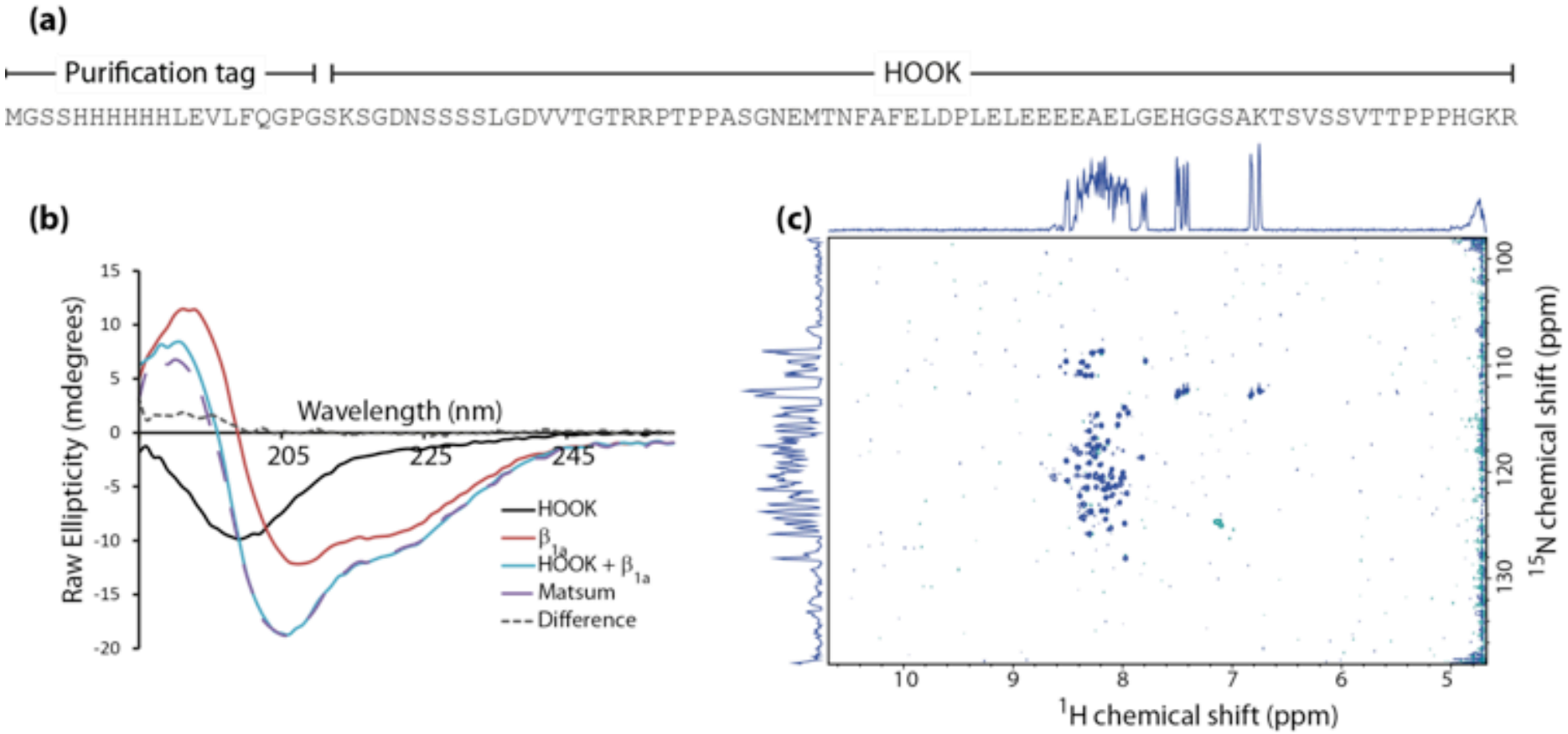
Suppl. Fig. 1 . The HOOK is intrinsically disordered in solution and does not interact with β_{1a}. (a) The primary sequence of the $HOOK_{185–255}$ with an N-terminal hexahistidine tag. (b) CD spectra of the HOOK (7 μM) and β_{1a} NH (2 μM) in isolation and in combination ($\beta_{1a\text{-}hOOK}$ at 7 μM and $\beta_{1a\text{-}SH3/GK}$ at 2 μM). Spectra were recorded at 20˚C in 20 mM phosphate buffered at pH 7.0 in a 1 mm quartz cuvette. Spectra are an average of three scans and are buffer baseline corrected. The mathematical sum (Matsum) of $\beta_{1a\text{-}hOOK}$ and $\beta_{1a\text{-}SH3/GK}$ NH spectra match the spectrum of HOOK and β_{1a} NH in combination. The difference (difference) between the mathematical sum and combination spectrum is also shown. (c) ^{15}N-HSQC spectrum of HOOK resuspended in 20 mM phosphate buffer pH 5.0 obtained at 298 K. ^{15}N-HSQC titrations were conducted at 298 K in 20 mM phosphate pH 7.0.



Suppl. Fig. 2 AID influences interactions between helix 9 and the SH3 domain. (a) β_{1a} (b) β_{2a} without AID (PDB ID: 1T0H white cartoon with red sticks) and in complex with AID (PDB ID: 1T0J cyan cartoon with blue sticks), (c) β_{2a} without AID (PDB ID: 13TL, light pink) in complex with AID (PDB ID: 13TS, white) (d) β_3 without AID (PDB ID: 1VYU, gold) and in complex with AID (PDB ID: 1VYT, white).