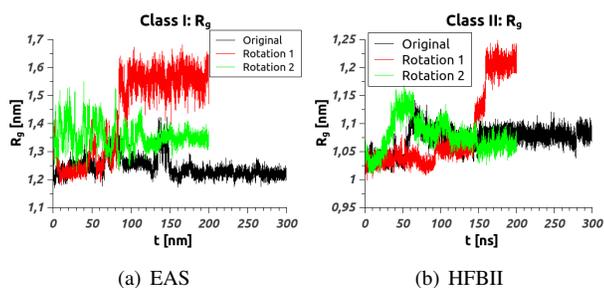
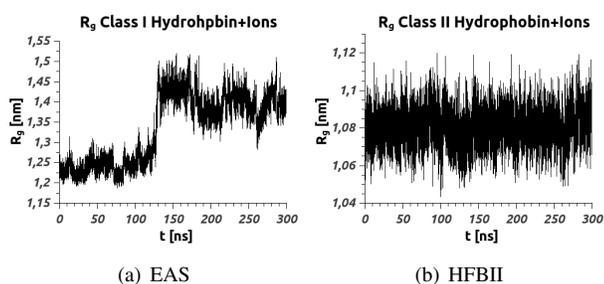


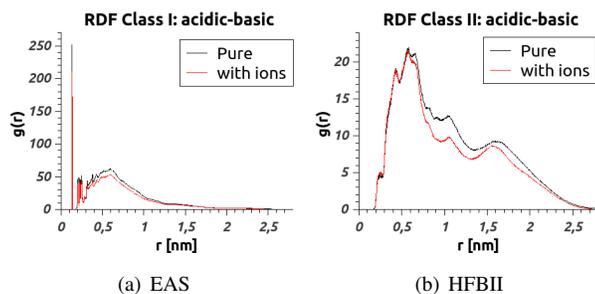
## 1 Supplementary Information



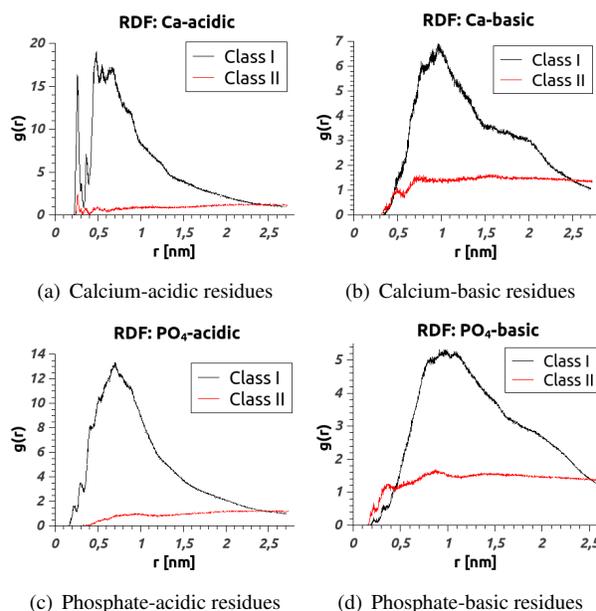
**Fig. 1** Radius of gyration for both proteins at the interface with varied initial orientations.



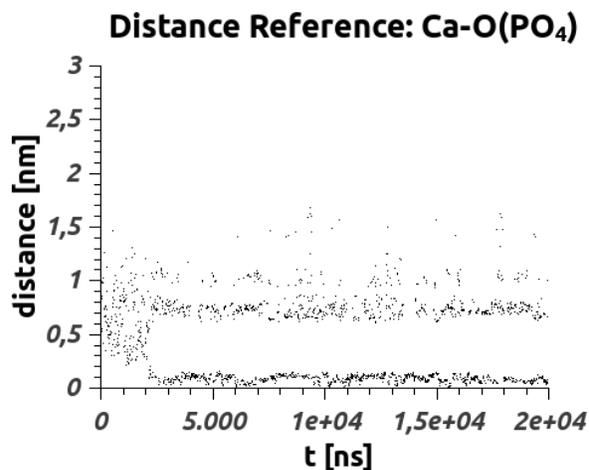
**Fig. 2** Radius of gyration for both proteins at the interface after the addition of ions.



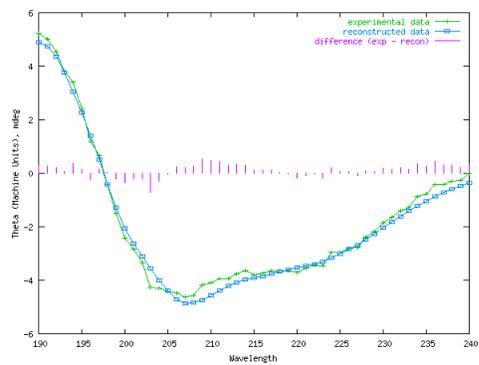
**Fig. 3** Radial distribution function (RDF) of acidic against basic residues for both proteins with and without ions.



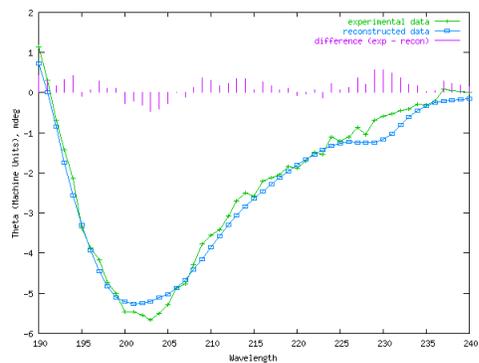
**Fig. 4** Radial distribution functions for the ions against the charged residues.



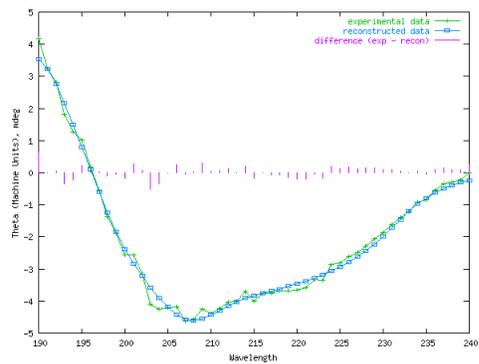
**Fig. 5** Mean distance between all  $Ca^{2+}$  and all oxygens of  $HPO_4^{2-}$  for a reference simulation containing only water and the ions.



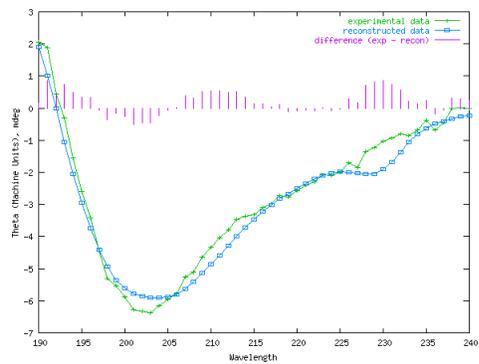
(a) H\*B



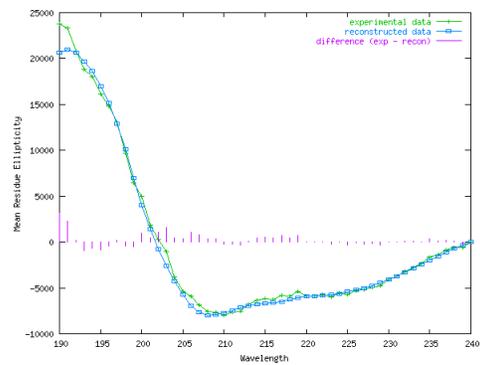
(b) HFBII



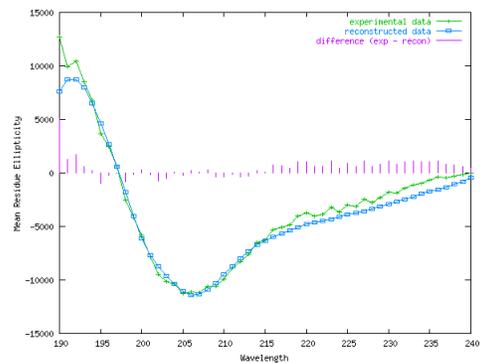
(c) H\*B with hexane



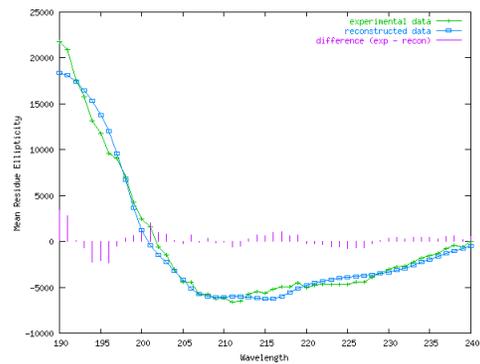
(d) HFBII with hexane



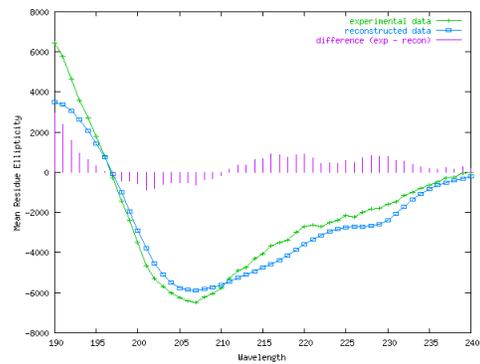
(a) H\*B with HAP



(b) HFBII with HAP



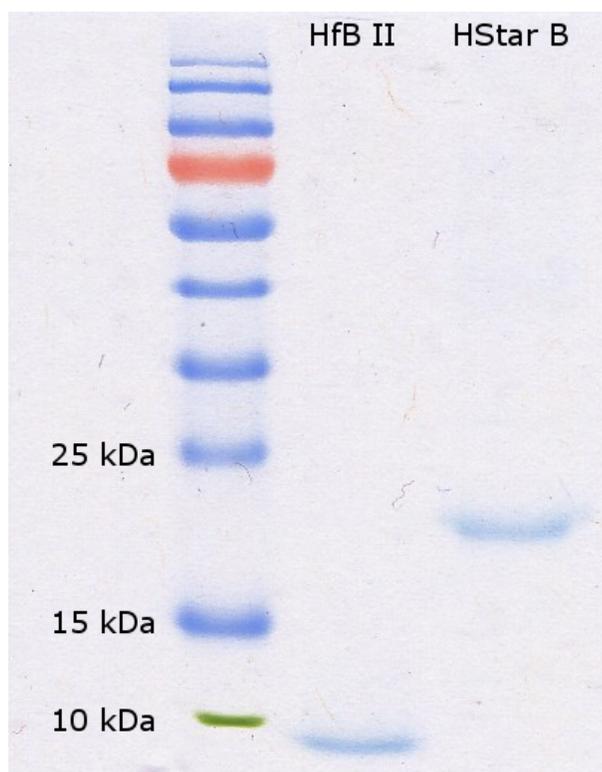
(c) H\*B with HAP and hexane



(d) HFBII with HAP and hexane

**Fig. 6** Measured CD-spectra of hydrophobins without HAP together with the CONTIN 3 fit via the Dichroweb server.

**Fig. 7** Measured CD-spectra of hydrophobins with HAP together with the CONTIN 3 fit via the Dichroweb server.



**Fig. 8** SDS Gel of both hydrophobins measured in CD.