



**Supplemental Figure S3** 

## Supplemental Figure S3: Analysis of non-exchangeable protons for the "Divide and Conquer approach"

Overlays of regions of <sup>1</sup>H-<sup>13</sup>C HSQC spectra showing the aromatic H8-C8 of HPI and the three subdomains HPI-a, HPI-b and HPI-c, at 30°C. (**A**) <sup>1</sup>H-<sup>13</sup>C HSQC spectra showing the aromatic H8-C8 of selectively labeled [<sup>13</sup>C/<sup>15</sup>N-G] HPI (black) and [<sup>13</sup>C/<sup>15</sup>N-G] HPI-a (blue), recorded at 30°C. (**B**) <sup>1</sup>H-<sup>13</sup>C HSQC spectra showing the aromatic H8-C8 of selectively labeled [<sup>13</sup>C/<sup>15</sup>N-G] HPI (black) and [<sup>13</sup>C/<sup>15</sup>N-G/A] HPI-b (blue), recorded at 30°C. (**C**) <sup>1</sup>H-<sup>13</sup>C HSQC spectra showing the aromatic H8-C8 of selectively labeled [<sup>13</sup>C/<sup>15</sup>N-G] HPI (black) and [<sup>13</sup>C/<sup>15</sup>N-G] HPI-c (blue), recorded at 30°C. (**D**) <sup>1</sup>H-<sup>13</sup>C TROSY-HSQC spectra showing the aromatic H8-C8 of fully labeled <sup>13</sup>C/<sup>15</sup>N HPI (black) and selectively labeled [<sup>13</sup>C/<sup>15</sup>N-A/G] HPI-b (blue), recorded at 30°C. It is worth noting that G73 and G74 that were not visible in the <sup>1</sup>H-<sup>13</sup>C HSQC spectrum (B), show up and exhibit chemical shifts similar to those observed in HPI-b. In addition, chemical shifts of A34 and A77 are identical in HPI-b and HPI.