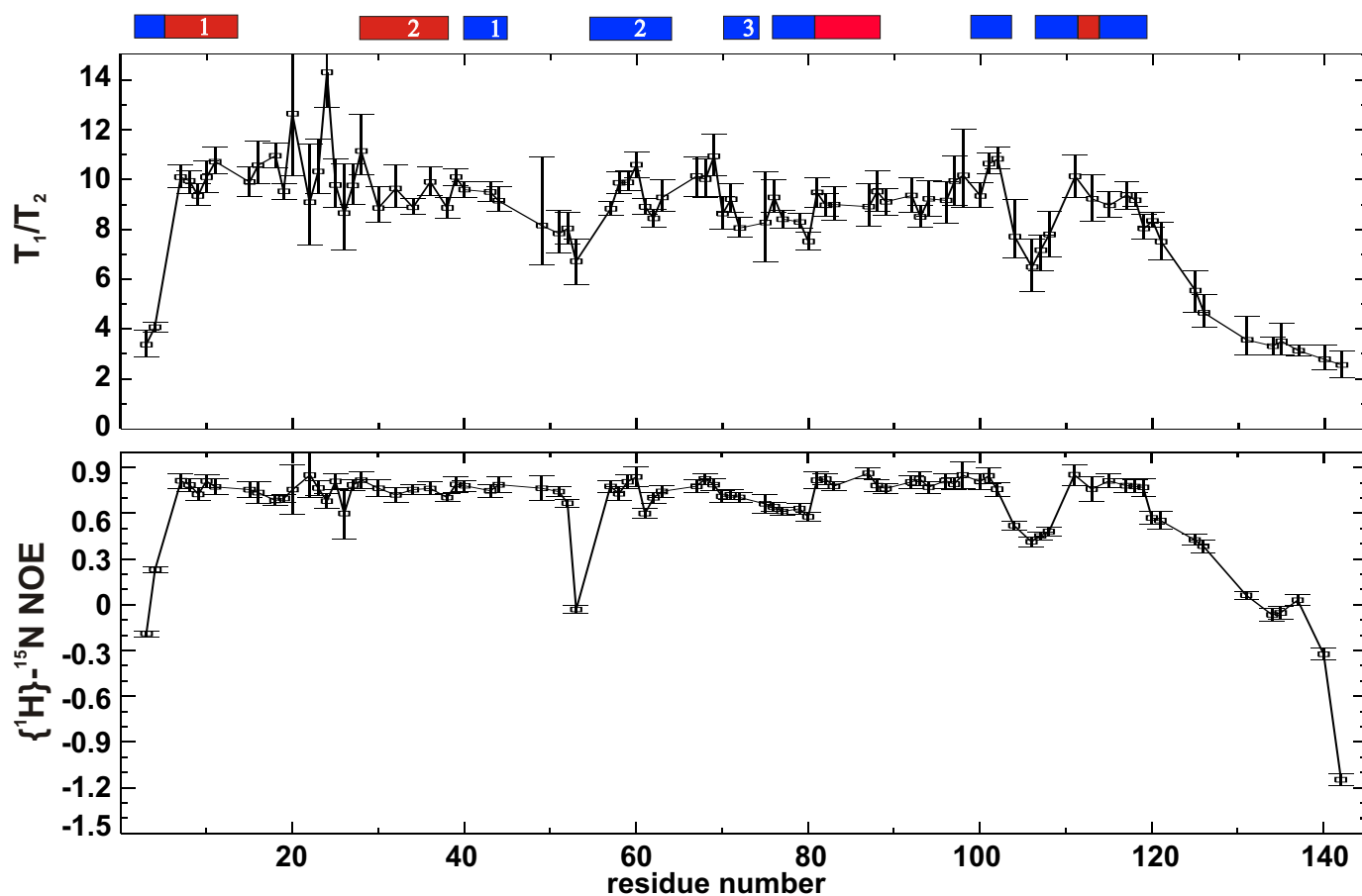


**Figure S2**  $^{15}\text{N}$  relaxation analysis of the Ago2 PAZ domain.



$T_1$ ,  $T_2$  and heteronuclear NOE were measured at 295 K as described (Farrow, N. A., Muhandiram, R., Singer, A. U., Pascal, S. M., Kay, C. M., Gish, G., Shoelson, S. E., Pawson, T., Forman-Kay, J. D., and Kay, L. E. (1994). *Biochemistry* **33**, 5984-6003).

The correlation time for the reorientation is  $\tau_c = 11$  ns, consistent with a monomeric state of the PAZ domain in solution.

The  $T_1/T_2$  ratio indicates regions of internal motion at time scales above or below the correlation time of the overall tumbling if the observed value differs significantly from the average  $T_1/T_2$  ratio (upper panel).

Heteronuclear  $\{^1\text{H}\}-^{15}\text{N}$  NOE values below 0.8 represent backbone amides of residues that undergo fast internal motion (lower panel).