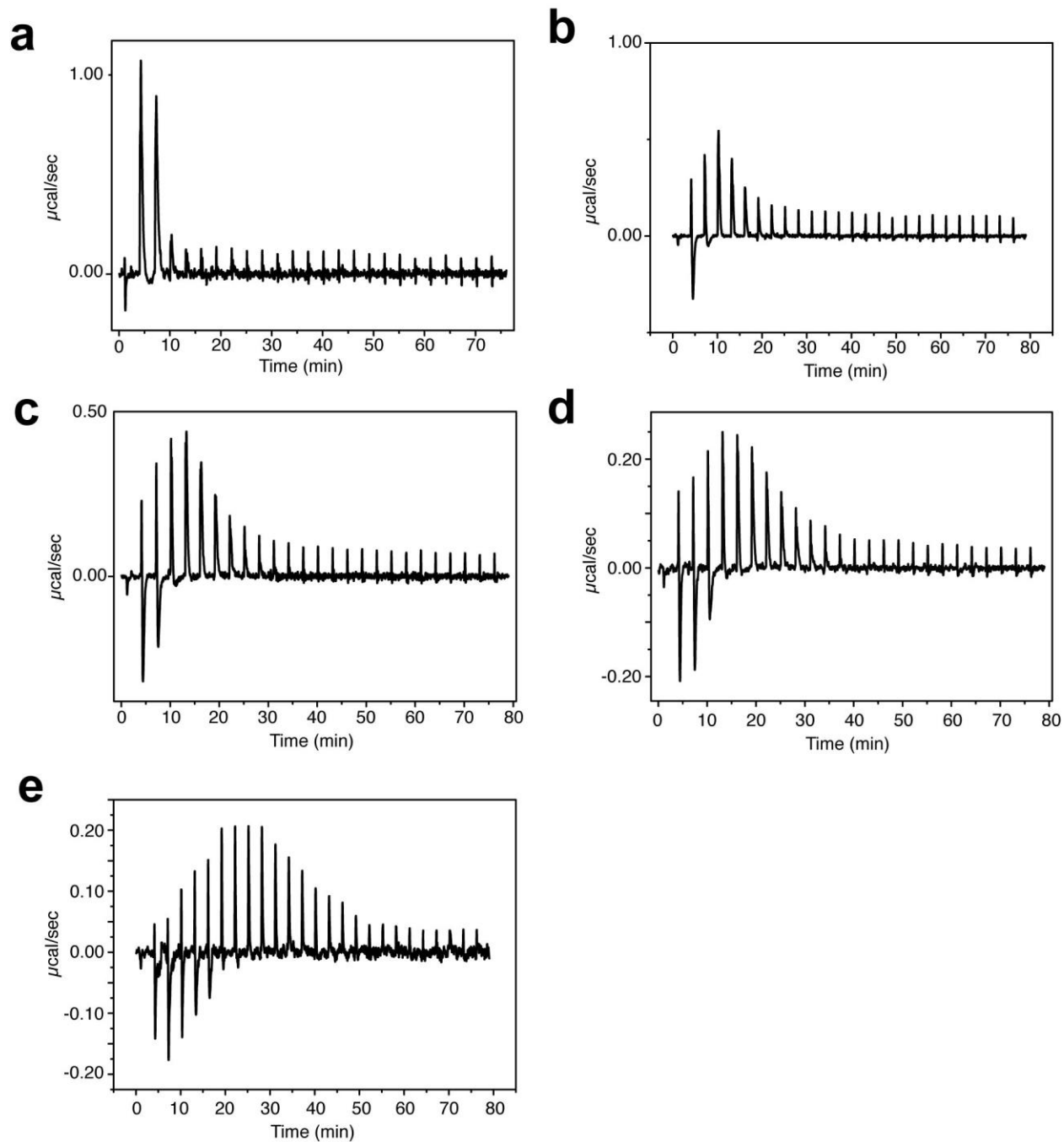


Supplementary Figure 1

The structure of the misfolded monomeric conformation of TTR is well defined.

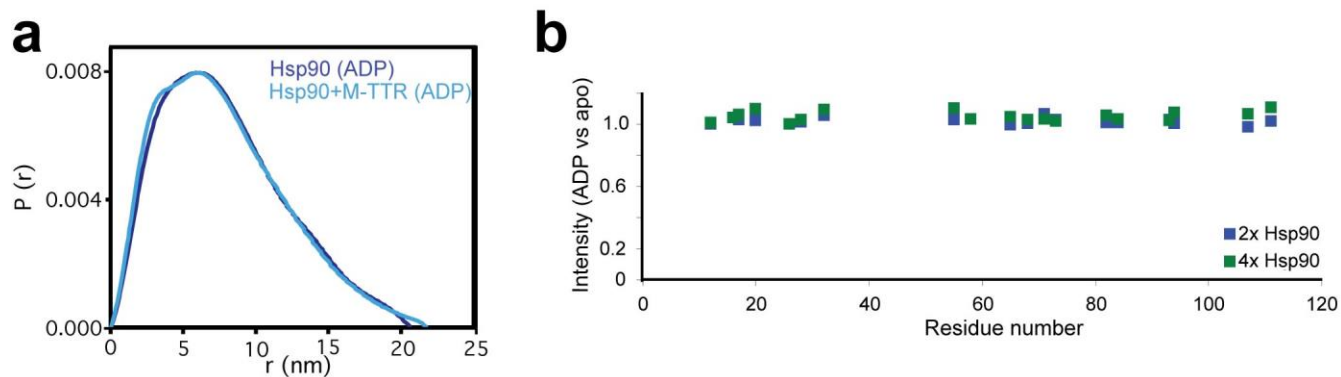
(a) Comparison of ^1H - ^{15}N NMR spectra of M-TTR at ambient pressure (green) and 500 bar (blue). Working at 500 bar improves the spectral quality. (b) Experimentally observed NOEs (green dotted lines) are visualized on the 3D structure of M-TTR (blue).



Supplementary Figure 2

Reproducibility in calorimetric titrations of Hsp90 with M-TTR.

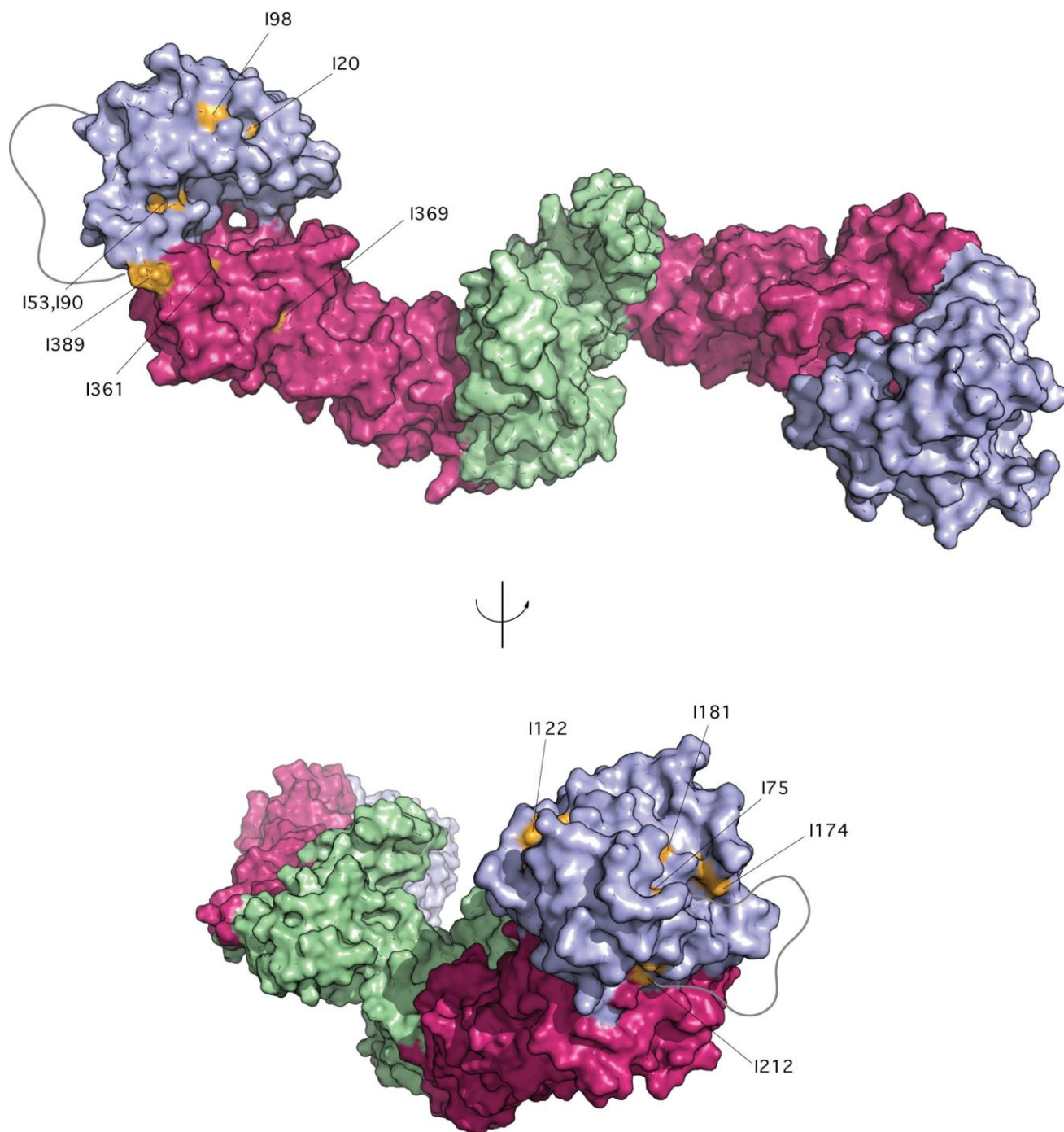
From left to right and top to bottom, raw data resulting from the titration of 25x1.5 μl aliquots of 1671 μM of M-TTR into 25 μM of Hsp90 (a), 783 μM of M-TTR into 30 μM of Hsp90 (b), 520 μM of M-TTR into 30 μM of Hsp90 (c), 313 μM of M-TTR into 25,5 μM of Hsp90 (d) and 166 μM of M-TTR into 22,75 μM of Hsp90 (e) are shown. The biphasic thermodynamic behavior was present in all tested conditions.



Supplementary Figure 3

Nucleotide binding does not promote allosteric changes in the Hsp90–M-TTR complex.

(a) As observed from the $P(r)$ distribution obtained from SAXS scattering data, ADP binding does not change the global extended conformation of the Hsp90/M-TTR complex. While Hsp90 shows $R_g = 6.34 \pm 0.16$ nm and $D_{MAX} = 20.94 \pm 0.52$ nm, the Hsp90+M-TTR complex has $R_g = 6.58 \pm 0.44$ nm and $D_{MAX} = 21.77 \pm 0.71$ nm. (b) Comparison of NMR signal intensities of the methyl signals of M-TTR/Hsp90 in the absence and presence of 2 mM ADP. Samples contained 0.07 mM ^{13}C -labeled and methyl-protonated M-TTR in 50 mM MES, pH 7, 100 mM NaCl, 5 mM DTT, 1 mM MgSO_4 , 0.1 mM DSS, and a 2-fold (blue) or 4-fold (green) molar excess of Hsp90.



Supplementary Figure 4

Hsp90 uses several binding interfaces to bind M-TTR.

Residues in the N- and M-domain of Hsp90, which show the strongest PCSs in the presence of M-TTR, are highlighted in orange in the 3D structure. Hsp90's N-domain is colored in light blue, M-domain in red and C-terminal domain in light green. The charged linker, which connects Hsp90's N and M domain, is represented by a grey line.

Supplementary Table 1. Binding properties of M-TTR and Hsp90 obtained by ITC.

	First phase	Second phase
<i>K_d</i> (μM)	0.3 (\pm 0.7)	47.3 (\pm 4.9)
ΔH (kcal mol^{-1})	-7.99 (\pm 0.36)	19.10 (\pm 0.99)
$T\Delta S$ (kcal mol^{-1})	0.19	2.26