

Supplementary Information

Development of transgenic *Caenorhabditis elegans* expressing human transthyretin as a model for drug screening

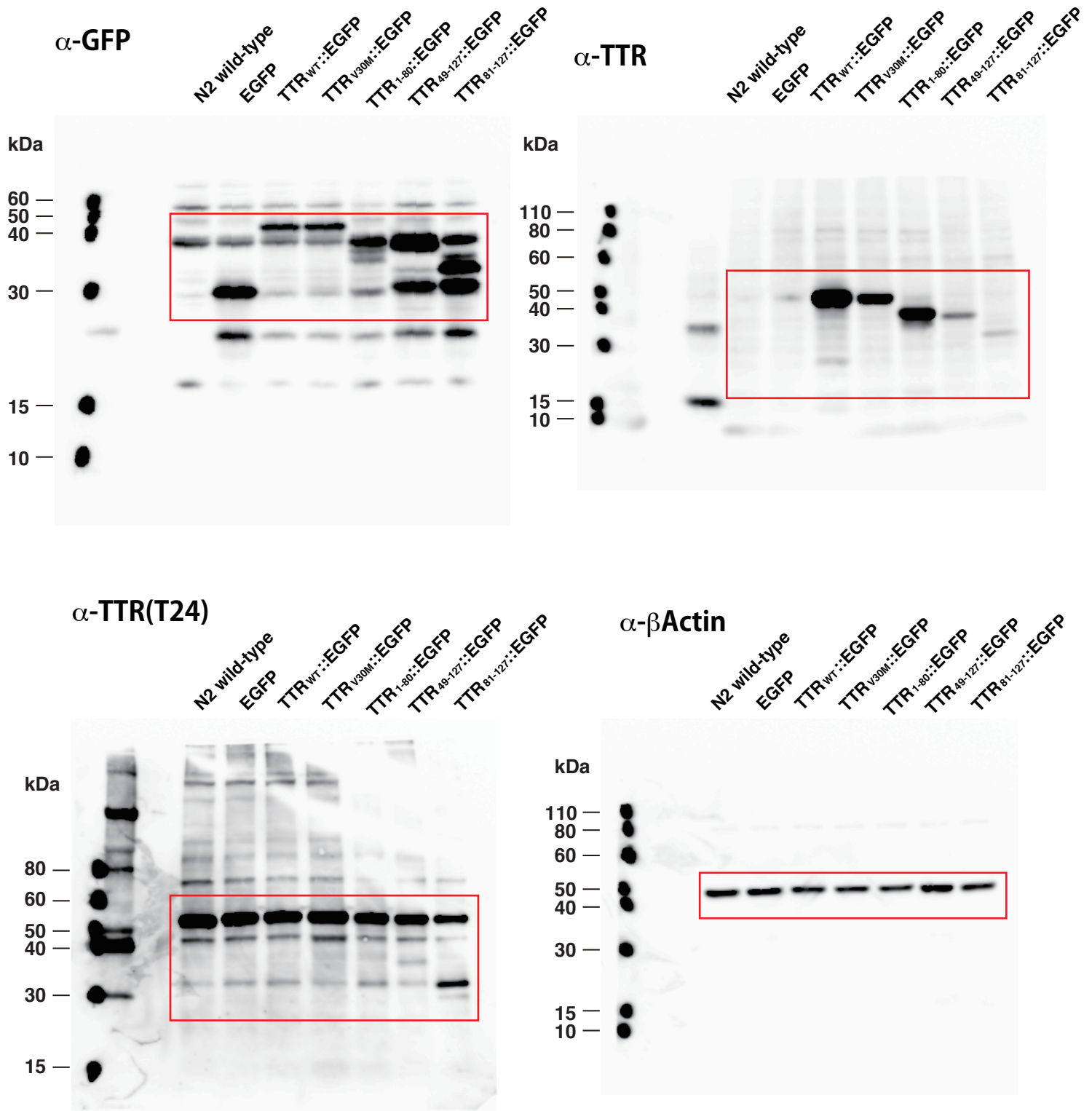
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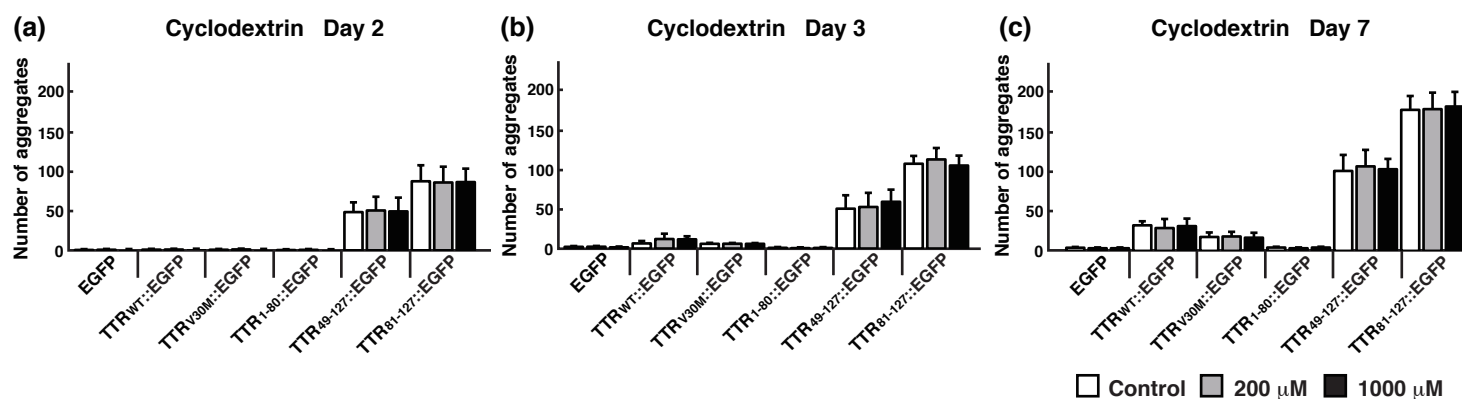
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Tsuda et al. Supplementary Figure S1



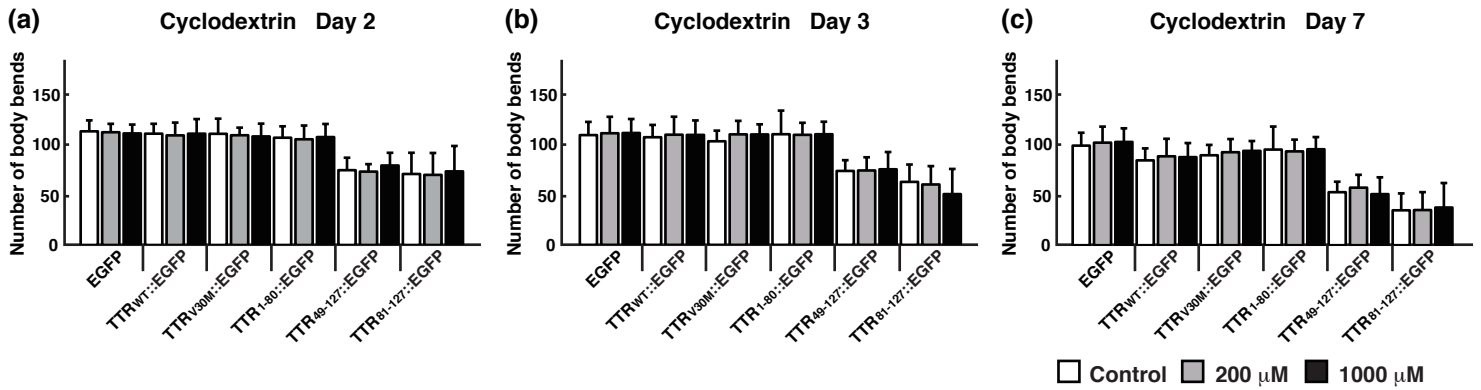
Supplementary Figure S1. Full blots for detection of EGFP, TTR, C-terminal fragments of TTR and β -actin. Portions (red squares) are used in Figure 1b. The positions of molecular markers are shown to the left of the blots.

Tsuda et al. Supplementary Figure S2



Supplementary Figure S2. Effects of β -cyclodextrin on the TTR::EGFP aggregate formation in transgenic worms. Six kinds of transgenic worms expressing EGFP, TTR_{WT}::EGFP, TTR_{V30M}::EGFP, TTR₁₋₈₀::EGFP, TTR₄₉₋₁₂₇::EGFP, or TTR₈₁₋₁₂₉::EGFP were used. The number of aggregates in a worm was counted on days 2 (a), 3 (b) and 7 (c). The day when eggs were laid was defined as day 0. Worms were grown in the absence of drug (white bars) or in the presence of the drug at 200 μ M (gray bars) or 1000 μ M (black bars). Plots represent of at least three independent experiments (16 animals for each strain). Error bars indicate SD.

Tsuda et al. Supplementary Figure S3



Supplementary Figure S3. Effects of β -cyclodextrin on motility of transgenic worms. Six kinds of transgenic worms expressing EGFP, TTR_{WT}::EGFP, TTR_{V30M}::EGFP, TTR₁₋₈₀::EGFP, TTR₄₉₋₁₂₇::EGFP, or TTR₈₁₋₁₂₉::EGFP were used. The number of body bends of worms per minute was counted in M9 buffer on days 2 (a), 3 (b) and 7 (c). The day when eggs were laid was said to be day 0. Worms were grown in the absence of drug (white bars) or in the presence of drug at 200 μ M (gray bars) or 1000 μ M (black bars). Plots represent at least three independent experiments (16 animals for each strain). Error bars indicate SD.

Supplementary Table S1. Oligonucleotide primers used in this study.

Primer name	Sequence (5' to 3')
TTR-5'- <i>SalI</i>	CCTGGTCGACGCCACCATGGCTTCTCATCGTCTGCTCC
TTR-3'- <i>BamHI</i>	CCAGGGATCCCGTTCCCTGGGATTGGTGACGAC
EGFP-3'- <i>EcoRV</i>	CCTGGATATCCGCTTTACTTGTACAGCTCG
ns-fTTR-5'- <i>SalI</i>	CCTGGTCGACGCCACCATGGGCCCCTACGGGCACCGGTGAATCC
V30M-down	CCTGCCATCAATGTGGCCATGCATGTGTTTCAGAAAGG
V30M-up	CCTTTCTGAACACATGCATGGCCACATTGATGGCAGG
1-80-down	CCAAATCTTACTGGAAGCGGGATCCACCGGTTCGC
1-80-up	GCGACCGGTGGATCCCGCTTCCAGTAAGATTTGG
ns49-127-down	GCGTCGACGCCACCATGACCAGTGAGTCTGGAGAG
ns49-127-up	CTCTCCAGACTCACTGGTCATGGTGGCGTCGACGC
nsEGFP-up	CTAGCGTCGACGCCACCATGGTGAGCAAGGGCGAGGAGCTG
nsEGFP-down	CAGCTCCTCGCCCTTGCTCACCATGGTGGCGTCGACGCTAG
EGFP forward	ACGTAAACGGCCACAAGTTC
EGFP reverse	AAGTCGTGCTGCTTCATGTG
β -Actin forward	GTGTGACGACGAGGTTGCCGCTCTTGTTGTAGAC
β -Actin reverse	GGTAAGGATCTTCATGAGGTAATCAGTAAGATCAC