

Supplementary Information for:

# Molecular Recognition of Structures is Key in the Polymerization of Patterned Barnacle Adhesive Sequences

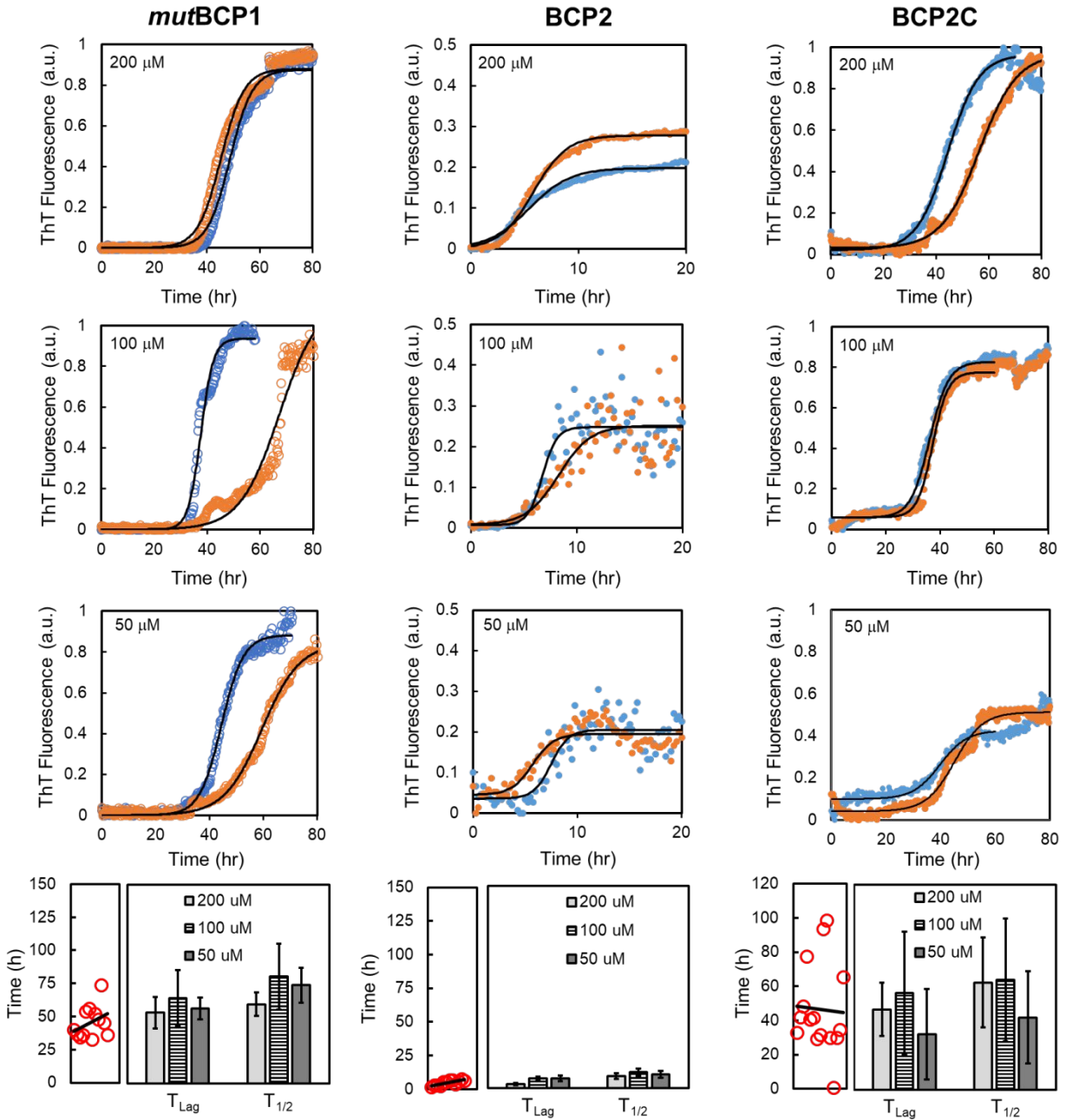
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## AUTHOR ADDRESSES

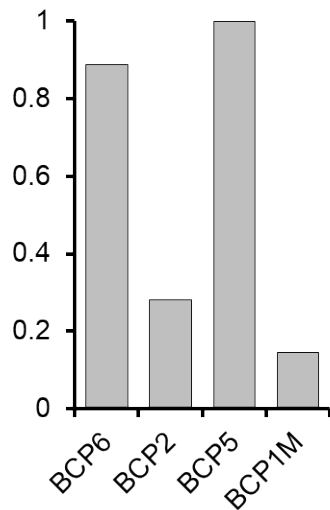
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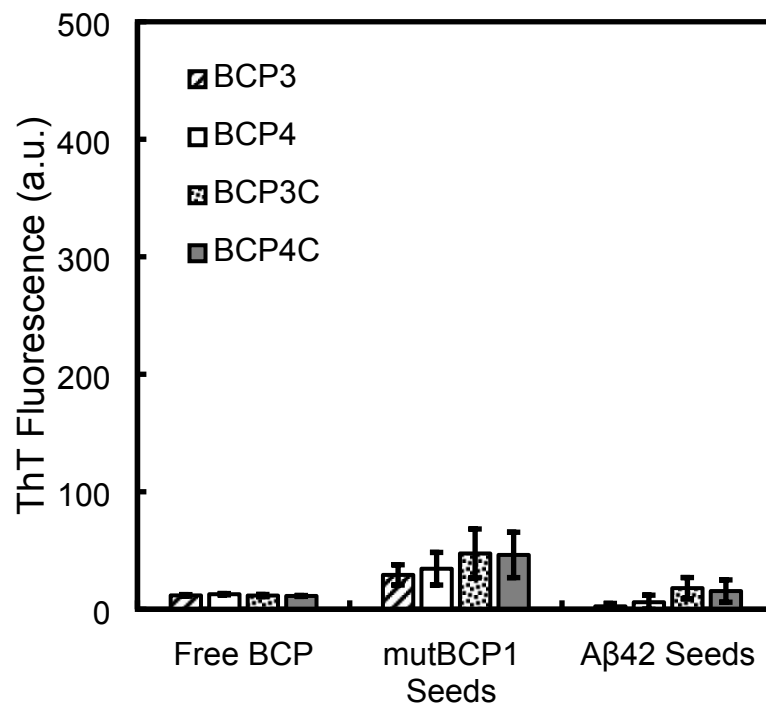


**Figure S1.** Representative polymerization curves for peptides observed to undergo aggregation with similar  $T_{\text{lag}}$  and  $T_{1/2}$  times at 50, 100 and 200  $\mu\text{M}$ . (Bottom) Plots showing all  $T_{\text{lag}}$  times for all concentrations and all active peptides as well as bar plots with quantified standard deviation.

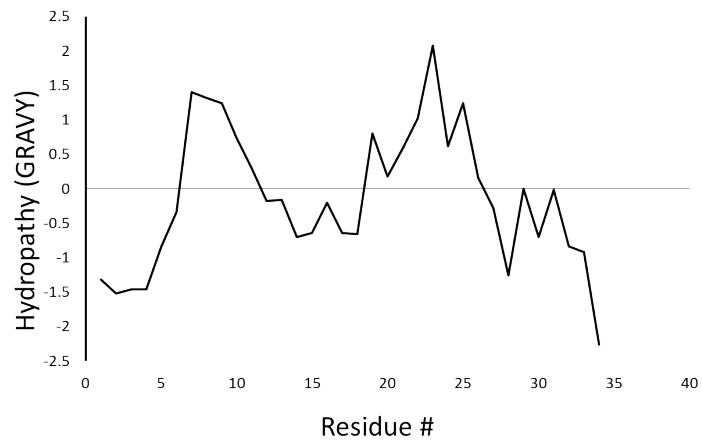


Peptide	AU	Normalized
BCP2C	0.3	0.89
BCP2	0.1	0.28
BCP1C	0.34	1
mutBCP1	0.05	0.15

**Figure S2.** Raw and normalized absorbance data from FTIR as a ratio of  $1625\text{ cm}^{-1}$  to  $1698\text{ cm}^{-1}$



**Figure S3.** Seed assay performed using *mutBCP1* and Aβ42 seeds against BCPs 3/4/3C/4C showing little cross-seeding activity.



**Figure S4.** Kyte and Doolittle hydropathy plot of BCP1C showing hydrophobic stretch across residues 7-11.