

## Supplementary Information

# Newly Discovered Micropeptide Regulators of SERCA Form Oligomers but Bind to the Pump as Monomers

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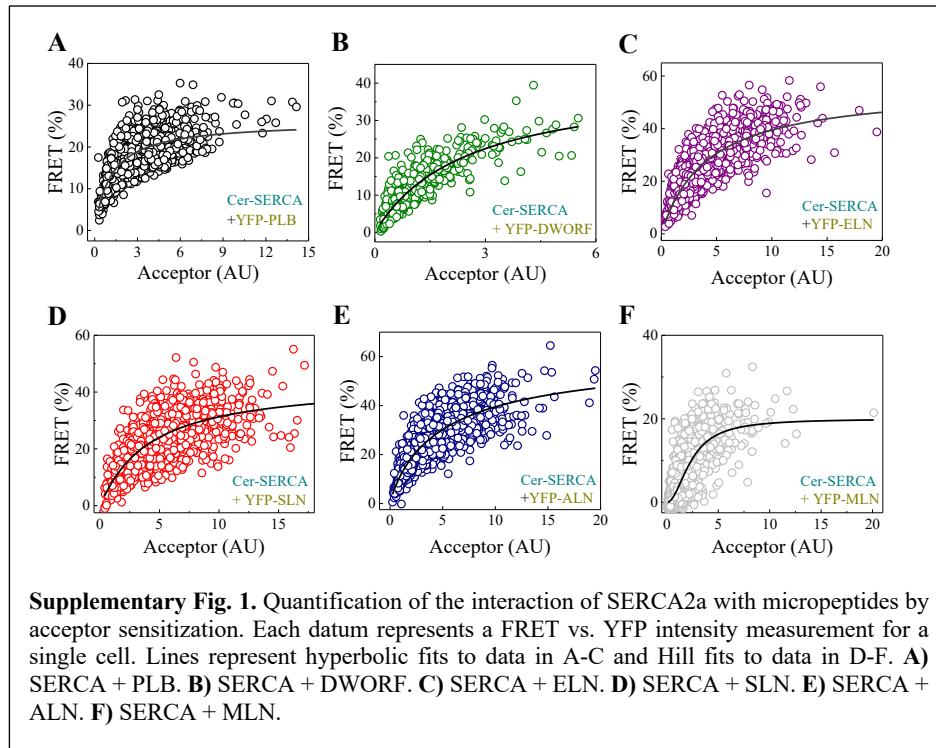
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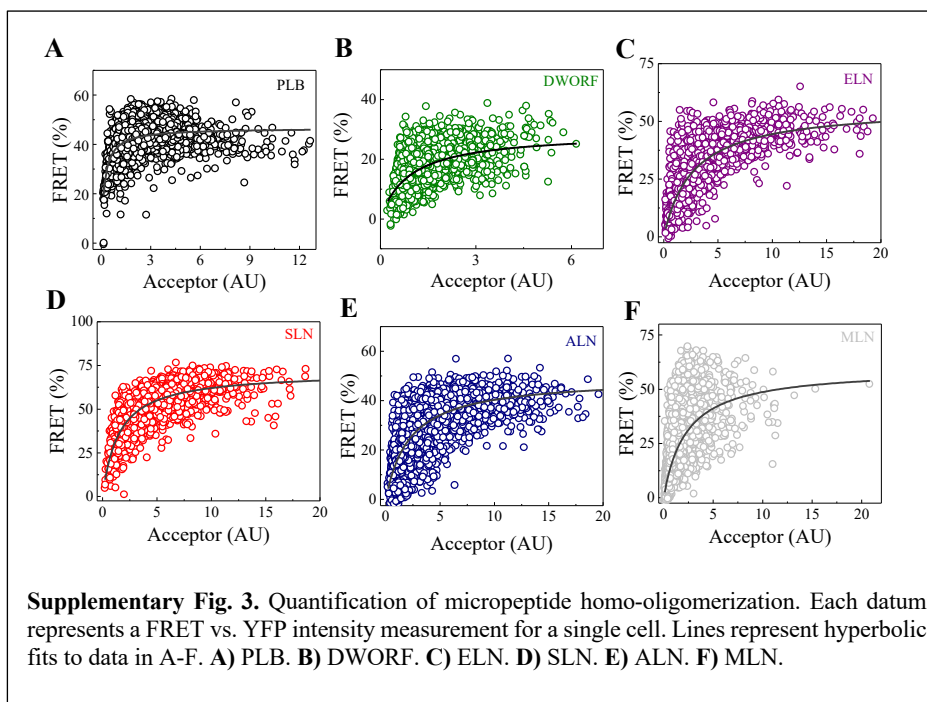
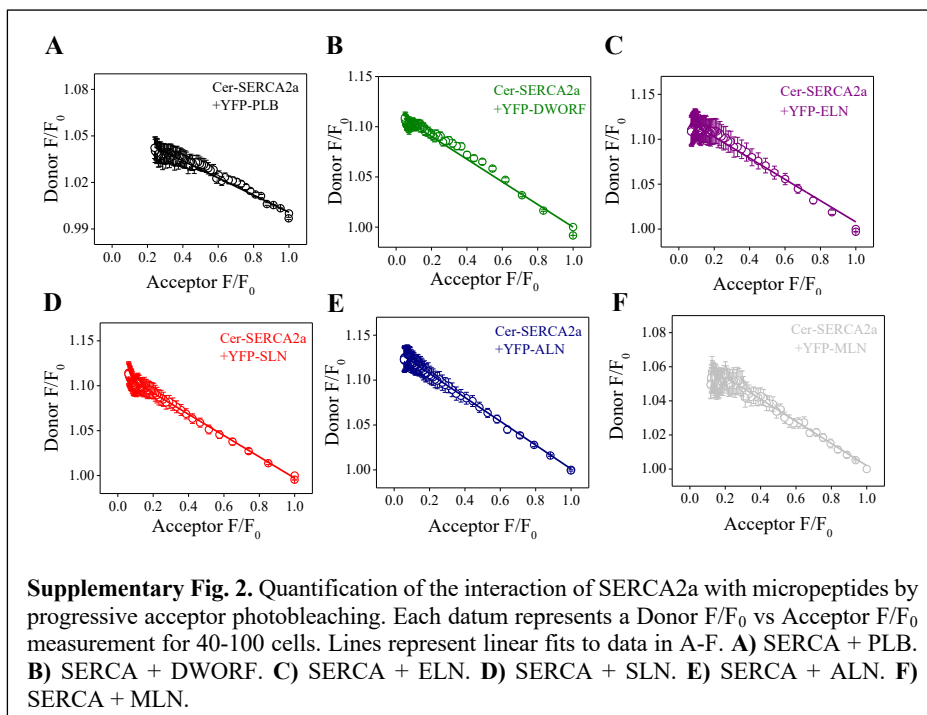
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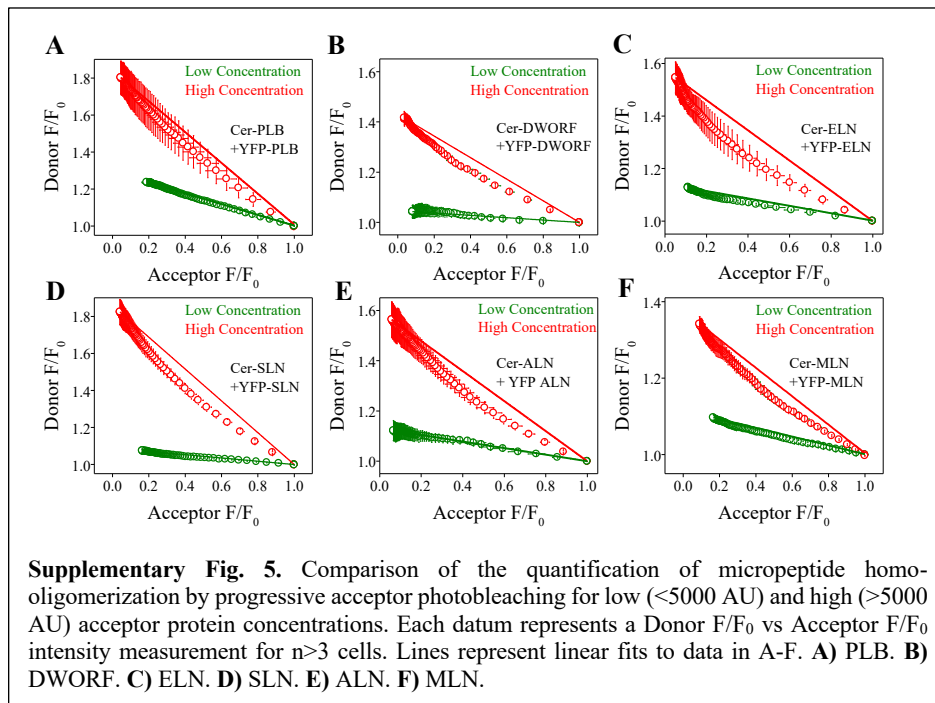
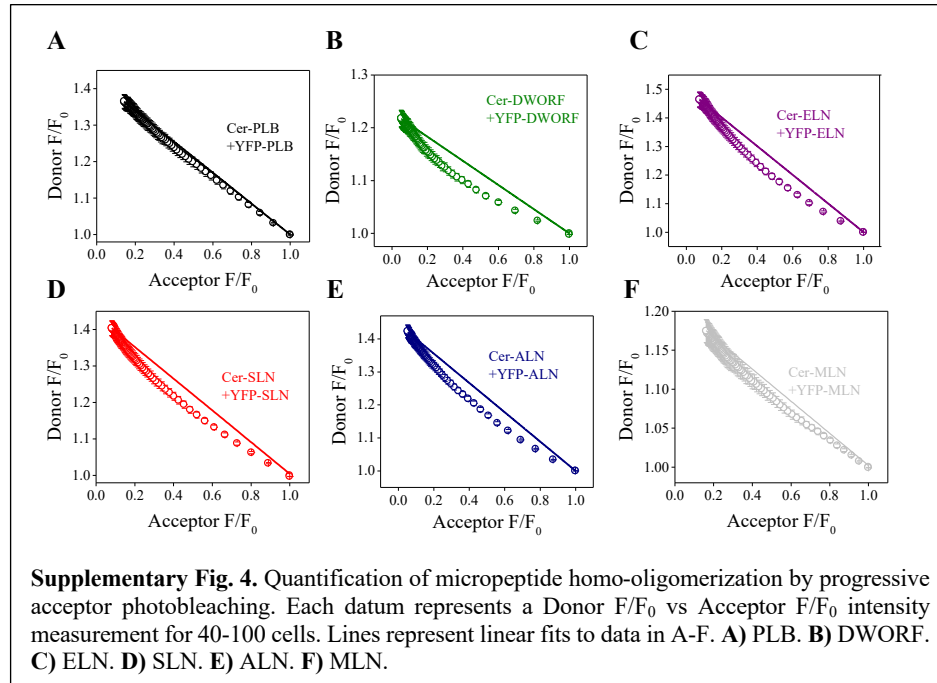
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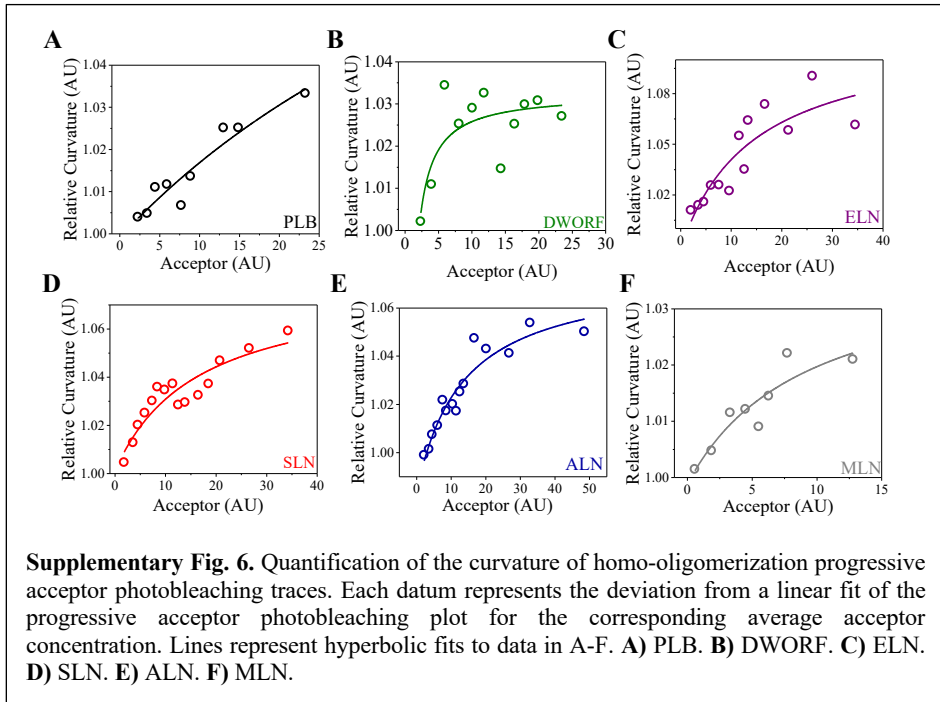
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**ANOVA statistical analysis**

micropeptide homo-oligomerization			SERCA-micropeptide regulatory complex		
micropeptides	FRET <sub>max</sub> <i>p</i> -value	K <sub>D1</sub> <i>p</i> -value	micropeptides	FRET <sub>max</sub> <i>p</i> -value	K <sub>D2</sub> <i>p</i> -value
SLN PLB	8.7E-04*	6.4E-03*	DWORF PLB	4.4E-01	9.9E-01
DWORF PLB	7.4E-03*	1.1E-03*	ELN PLB	8.5E-08*	2.7E-07*
DWORF SLN	3.7E-07*	9.5E-01	ELN DWORF	5.4E-07*	3.4E-07*
ALN PLB	5.7E-01	3.1E-07*	SLN PLB	5.2E-02	1.5E-02*
ALN SLN	2.8E-02*	5.9E-04*	SLN DWORF	8.2E-01	3.9E-02*
ALN DWORF	2.3E-04*	3.6E-03*	SLN ELN	1.1E-05*	1.0E-03*
ELN PLB	2.5E-01	1.3E-07*	ALN PLB	1.5E-06*	4.6E-05*
ELN SLN	9.9E-02	8.1E-05*	ALN DWORF	8.0E-05*	9.8E-05*
ELN DWORF	6.4E-05*	4.6E-04*	ALN ELN	5.8E-01	4.1E-01
ELN ALN	9.9E-01	9.2E-01	ALN SLN	1.7E-03*	1.6E-01
MLN PLB	7.8E-02	3.2E-04*	MLN PLB	6.1E-01	7.9E-01
MLN SLN	3.0E-01	7.1E-01	MLN DWORF	1.7E-02*	9.7E-01
MLN DWORF	1.8E-05*	9.9E-01	MLN ELN	8.9E-10*	5.2E-06*
MLN ALN	7.9E-01	1.2E-02*	MLN SLN	8.6E-04*	2.5E-01
MLN ELN	9.8E-01	1.5E-03*	MLN ALN	1.1E-07*	1.3E-03*

**Supplementary Table 1.** One-way analysis of variance (ANOVA) with Tukey's post hoc test of K<sub>D</sub> and FRET<sub>max</sub> values for SERCA2a – micropeptide interactions and micropeptide homo-oligomerization. *P*-values less than 0.05 are highlighted by \*.