

**Table S1. Primer Sequences Used to Generate Plasmid Constructs**

Proteins	Plasmid	Primer Sequence	
		Forward (5'→3')	Reverse (5'→3')
TgADF WT	pET16b+/TgADF	GGG AAT CCA TAT GGC GTC CGG AAT GGG TGT TG	GAC GGA TCC TTA CGC GAG GGG TGC GAG GTC GC
TgADF G66K	pET16b+/TgADF G66K	GCC GAT TCG GCG TGT ACG ACT GCA AGA ACA AGA TCC AGT TCG TTC TTT G	CAA AGA ACG AAC TGG ATC TTG TTC TTG CAG TCG ATC ACG CCG AAT CCG C
TgADF G66R	pET16b+/TgADF G66R	CGG CGT GTA CGA CTG CCG CAA CAA GAT CCA GTT C	GAA CTG GAT CTT GTT GCG GCA GTC GAT CAC GCC G
TgADF-t	pET16b+/TgADF-SpCOF-t	GGG AAT CCA TAT GGC GTC CGG AAT GGG TGT TG	GAG GAT CCT ACT TAC GAG TAA CCT TCT CAA GAA CCG CGA GGG GTG CGA GGT CGG
TgADF S3A	pET16b+/TgADF S3A	GAA GGT CGT CAT ATG GCG GCC GGA ATG GGT GTT GAC G	CGT CAA CAC CCA TTC CGG CCG CCA TAT GAC GAC CTT C
TgADF S3C	pET16b+/TgADF S3C	GAA GGT CGT CAT ATG GCG TGC GGA ATG GGT GTT GAC G	CGT CAA CAC CCA TTC CGC ACG CCA TAT GAC GAC CTT C
TgADF S3E	pET16b+/TgADF S3E	GAA GGT CGT CAT ATG GCG GAG GGA ATG GGT GTT GAC GAG	CTC GTC AAC ACC CAT TCC CTC CGC CAT ATG ACG ACC TTC