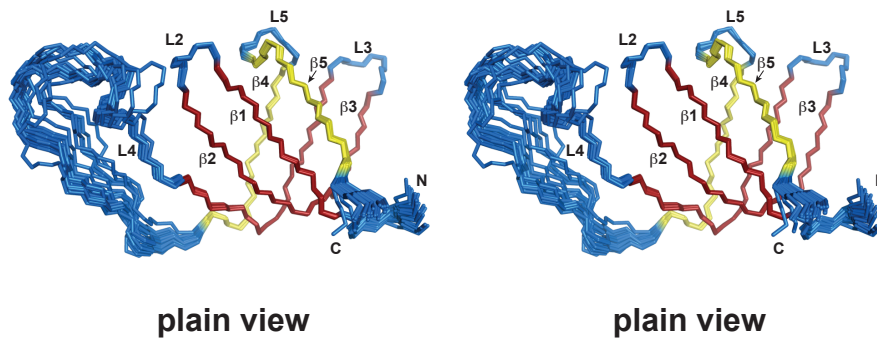
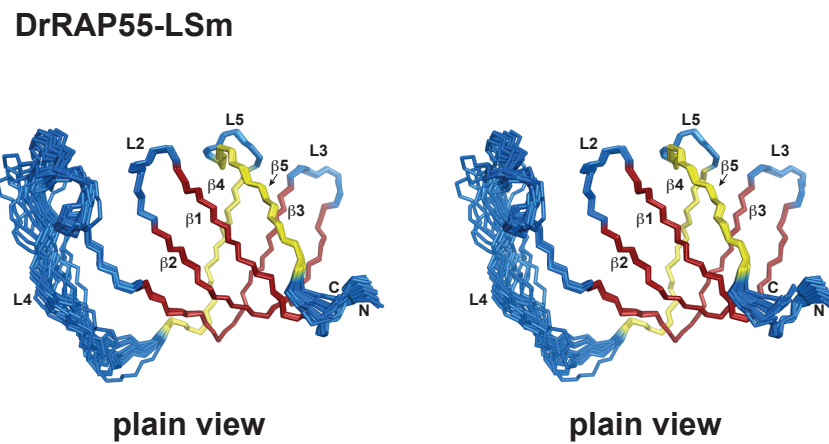


DmTral-LSm



Supplemental Figure S1. Ensemble of 22 lowest energy NMR structures of DmTral-LSm (plain view, stereo) showing the structured N-terminal region (residues 7–79). Secondary structure elements are colored as in Figure 4.



Supplemental Figure S2. Ensemble of 19 lowest energy NMR structures of DrRAP55-LSm (plain view, stereo) showing the structured N-terminal region (residues 7–79). Secondary structure elements are colored as in Figure 5.

Tritschler et al.

Supplemental Table I. DNA constructs and oligonucleotides

Construct	Plasmid	Tag	Cloning site	Oligo
DmCup	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRV/NotI	Forw.: GGAATTCGATATCATGGACCCTATGAAAGAGGAGGCGATC Rev.: ATAAGAATGCGGCCGCTTAATGAAACTCATCCCGCTGTGGG
DmDCP2	pAc5.1B-EGFP	N-term. EGFP-tag	HindIII/NotI	Forw.: CCCAAGCTTGATGGAAATCGCACCCTGATC Rev.: ATAAGAATGCGGCCGCTTAGCAAAACACATTTGCTATGAAG
DmMe31B	pAc5.1B-EGFP	N-term. EGFP-tag	HindIII/NotI	Forw.: CCCAAGCTTGATGATGACTGAAAAGTTAAATC Rev.: ATAAGAATGCGGCCGCTTATTGCTAACGTTGCCCTCCTCG
DmLSm1	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	Forw.: CGGAATTCTATGGACGACTTAAATC Rev.: TTCCTTTTTGCGGCCGCTTAGCAGAAGTCTCGTTGATTATGTTG
DmTral-L.Sm	pAc5.1B-EGFP	N-term. EGFP-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: GCCAAGCTTGAATTCTATGAGCGGGGATT Rev.: TTCCTTTTTGCGGCCGCGGAGCTGCGCCTGCATGATGGCC
DmTral	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	Forw.: CGGAATTCTATGAGCGGGGATTACCGGAG Rev.: ATAAGAATGCGGCCGCTTATGTGAAACTGCCGCCACCTGTTG
DmTral-R21E	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	Forw.: TCCAAGGCGGACATGAGTACGAGGGCCGCTG Rev.: CAGGCGGCCCTCGTACTCAATGTCCGCTTGGA
DmTral-R21ES13A115A	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	R21E Forw. oligo + S13A115A Forw. oligo R21E Rev. oligo + S13A115A Rev. oligo
DmTral-R21A	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	Forw.: TCCAAGGCGGACACATTGCATACGAGGGCCGCTG Rev.: CAGGCGGCCCTCGTATGCAATGTCCGCTTGGA
DmTral_395-542	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	Forw.: CGGAATTCTCAGAACAAGCCGCGGAACAAG Rev.: TTCCTTTTTGCGGCCGCGTTCGTCGCGGTAAGTCCACGTCGTTG
DmTral_99-652	pAc5.1B-EGFP	N-term. EGFP-tag	EcoRI/NotI	Forw.: CGGAATTCTGGACCGCCCGAGATGCCGCGAG Rev.: TTCCTTTTTGCGGCCGCGCTTATGTGAAACTGCCGCCACCTGTTGC
DmCup	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRV/NotI	Forw.: GGAATTCGATATCATGGACCCTATGAAAGAGGAGGCGATC Rev.: ATAAGAATGCGGCCGCTTAATGAAACTCATCCCGCTGTGGG
DmDCP1	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRV/NotI	Forw.-HA: GGAATTCGATATCATGGCTTACCCATACGATGTTCCAGATTACGCTATGGCCGACGAGAGCATCAGC Rev.: ATAAGAATGCGGCCGCTTATTGATAITGAGGCTGGAGTGGAG
DmDCP2	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.-HA: CCCAAGCTTGATGGCTTACCCATACGATGTTCCAGATTACGCTATGAAAATCGCACCCTGATC Rev.: ATAAGAATGCGGCCGCTTAGCAAAACACATTTGCTATGAAG
DmEDC3	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRI/NotI	Forw.: CGGAATTCTATGGGTCCGACGGATCAAGACTGG Rev.: ATAAGAATGCGGCCGCTCAGTCCTTTGAGTGAATCGGTATC
DmEDC3-N44A	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRI/NotI	Forw.: GTGAGGGCTTCCGCGCAGGCGTGCCGCTGCCA Rev.: TCGCAGCGGCACGCTGCGCGGAAAGCCCTCAC
DmGW182	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.-HA: CCCAAGCTTGATGGCTTACCCATACGATGTTCCAGATTACGCTATGCGTGAAGCCCTTTTTTCCC Rev.: ATAAGAATGCGGCCGCTTAATCATCAACAATGGAATAAACGAG
DmHPat	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRV/NotI	Forw.: CAGATATCATGGATGACTCGTTTTTCGGC Rev.: TTCCTTTTTGCGGCCGCGCTAATCAATTTGATGCCTGGCTTCA
DmLSm1	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRI/NotI	Forw.: CGGAATTCTATGGACGACTTAAATC Rev.: TTCCTTTTTGCGGCCGCGCTTAGCAGAAGTCTCGTTGATTATGTTG
DmLSm4	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRI/NotI	Forw.: CGGAATTCTATGCTGCCACTTTCAC Rev.: TTCCTTTTTGCGGCCGCGCTTATTCCTATTTTGGCGGCTGGGGC
DmLSm7	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRI/XbaI	Forw.: CGGAATTCTATGGCAGATAAAAAGGTG Rev.: CTAGTCTAGACTCTATTGCGTTATAAACGGATTGGCGATG
DmMe31B	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.-HA: CCCAAGCTTGATGGCTTACCCATACGATGTTCCAGATTACGCTATGATGACTGAAAAGTTAAATC Rev.: ATAAGAATGCGGCCGCTTATTGCTAACGTTGCCCTCCTCG
DmMe31B_1-267	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.-HA: CCCAAGCTTGATGGCTTACCCATACGATGTTCCAGATTACGCTATGATGACTGAAAAGTTAAATC Rev.: AAGGAAAAAAGCGGCCGCTTATAGTGTAGCTCCTCCATCAG
DmMe31B_268-459	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.: CCCAAGCTTGAAGGGTGTCACTCAGTACTATG Rev.: AAGGAAAAAAGCGGCCGCTTATTGCTAACGTTGCCCTCC
DmTral-L.Sm	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: GCCAAGCTTGAATTCTATGAGCGGGGATT Rev.: TTCCTTTTTGCGGCCGCGGAGCTGCGCCTGCATGATGGCC
DmTral-L.Sm-E23K	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: GCGGACATTCGATACAAGGGCCGCTGTACACG Rev.: CGTGTACAGGCGGCCCTTGTATCGAATGTCCGC

Construct	Plasmid	Tag	Cloning site	Oligo
DmTral-L.Sm-R21E	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: TCCAAGGCGGACATTGAGTACGAGGGCCGCCTG Rev.: CAGGCGGCCCTCGTACTCAATGTCCGCCTTGGA
DmTral-L.Sm-R21E,E23K	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: TCATTTCCAAGGCGGACATTGAGTACAAGGCGCCCTGTACACGGTGGA Rev.: TCCACCGGTGTACAGGCGGCCCTTGTACTCAATGTCCGCCTTGAAATGA
DmTral-L.Sm-R42E	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: GCGCTCTCGAGTGTGGAGTCTTCGGTACAGAA Rev.: TTCTGTACCGAAGGACTCCACACTCGAGAGCGC
DmTral-L.Sm-S13A,I15A	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: CGGAGTTGGGCTCCAAAATCGCGCTCGCGTCCAAGGCGGACATTCGATA Rev.: TATCGAATGTCCGCCTTGGACGCGAGCGGATTTGGAGCCCAACTCCG
DmTral-L.SmR21E,S13A,I15A	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	R21E Forw. oligo + S13A/I15A Forw. oligo R21E Rev. oligo + S13A/I15A Rev. oligo
DmTral-L.Sm-F44A	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: CTCTCGAGTGTGCGATCCGCGGGTACAGAAGATCGGGAC Rev.: GTCCCGATCTCTGTACCCGCGGATCGCACACTCGAGAG
DmTral-L.Sm-R42E	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: GCGCTCTCGAGTGTGGAGTCTTCGGTACAGAA Rev.: TTCTGTACCGAAGGACTCCACACTCGAGAGCGC
DmTral-L.Sm-R21A	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: TCCAAGGCGGACACATTGCATACGAGGGCCGCCTG Rev.: CAGGCGGCCCTCGTATGCAATGTCCGCCTTGGA
DmTral-L.Sm-R21A,S13A,I15A	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	R21A Forw. oligo + S13A/I15A Forw. oligo R21A Rev. oligo + S13A/I15A Rev. oligo
DmTral-L.Sm- <i>Tex_del</i>	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: CGAGTGTGCGATCCTTCGGT GACACCCAGTTCCAGATAGC Rev.: GCTATCTGGAAGTGGGTGT CACCGAAGGATCGCACACTCG
DmTral	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.: CGTCCTCCAAGCTTGTATGAGCGGGGGATT Rev.: ATAAGAATGCGCGCCCTATTGTGAAACTGCCGCCACCTGTTG
DmTral_395-542	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: CGGAATTCTCAGAACAAGCCGCGGAACAAG Rev.: TTCCTTTTTTGGCGCCCGCTTTCGTCGCGGTAAGTCCACGTCGTG
DmTral_395-652	pAc5.1B-λN-HA	N-term. λN-HA-tag	EcoRI/NotI	Forw.: CGGAATTCTCAGAACAAGCCGCGGAACAAG Rev.: TTCCTTTTTTGGCGCCCGCTTATTGTGAAACTGCCGCCACCTGTGTC
DmTral_99-394	pAc5.1B-λN-HA	N-term. λN-HA-tag C-term. V5His6-tag	EcoRI/NotI	Forw.: CGGAATTCTGGACCGCCAGATGCCGCAG Rev.: TTCCTTTTTTGGCGCCCGCTTATTGGCCGACTGCCGACGATAGCCCTG
DmTral-R21E	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.: TCCAAGGCGGACATTGAGTACGAGGGCCGCCTG Rev.: CAGGCGGCCCTCGTACTCAATGTCCGCCTTGGA
DmMBP	pAc5.1B-λN-HA	N-term. λN-HA-tag	HindIII/NotI	Forw.: CGCAGCTTCATGAAAAATCGAAGAAGGTAAAC Rev.: ATGCGGCCCGCTAGTCTTTCAGGGCTTCATCG
DmTral-L.Sm	pETM-60	N-term. NusA-tag	NcoI/KpnI	Forw.: CATGCCATGGCAATGAGCGGGGATTACCGG Rev.: GGGGTACCCTACGGCAGCGTGTGGTTGTTG
DmDCP1	pBSact_short-EGFP	N-term. EGFP-tag	NcoI/BamHI	Forw.: CATGCCATGGCAATGGCCGACGAGAGCATCACGG Rev.: CGGGATCCTTATTGATATGTGGAGCTGGAGTCC