

Supplementary table 1. Sequences of the primers used for the generation of CrmD mutants. The substituted bases are underlined.

Primer	Mutation	Sequence (5'-3')
CrmD37	K44A	GGTACAGACTATAACAGTAATAATCTATGTTGT <u>GCACAATGCAATCC</u> TGGAAT
CrmD38	K44A	ATTCCAGGATTGCATTGT <u>GCACAACATAGATT</u> ATTACTGTTATAGTCTGTACC
CrmD39	P68A	TACAAAATGTGACAAGTG <u>CCAGATGACAC</u> CTTACATC
CrmD40	P68A	GATGTAAAGGTGTCATCT <u>GGCACTTGT</u> CACATTGTA
CrmD41	N77A	AGATGACACCTTACATCCATT <u>CTGCTCATAG</u> CCCCGCGTG
CrmD42	N77A	CACGC <u>GGGACTATGAGCAGGA</u> ATGGATGTAAGGTGTACATCT
CrmD43	N77F	AGATGACACCTTACATCCATT <u>CTT</u> CATAGCCCCGCGTG
CrmD44	N77F	CACGC <u>GGGACTATGAAAGGA</u> ATGGATGTAAGGTGTACATCT
CrmD45	Q93A/E95A	AAGTTGTCGAGGCAAATGTAGCAGTA <u>ATGCAGTAGCAG</u> ACTAAATCGTGAGTAAC
CrmD46	Q93A/E95A	GT <u>TACTACACGATT</u> AGTCGCTACT <u>GCATTACTG</u> CTACATTTGCCTGACAACCT
CrmD47	Q103A/D104A/R105A	GTAATCAAGTAGAGACTAA <u>ATCGT</u> GTAGTAACAC <u>AGCGGCCG</u> CAGTATGTGTCTGTGATC
CrmD48	Q103A/D104A/R105A	GATGCACAGACACATA <u>CTGCGGCCG</u> CTGTGTTACTAC <u>AGATTAGT</u> CTCTACTTGATTAC
CrmD49	Y141A/S142A/S143A	GTGGTTCTGGTTACGGTG <u>TATGGCGCCG</u> CAGCTAAAGGAGATGTAATATGTAAAAAGT
CrmD50	Y141A/S142A/S143A	ACTTTTACATATTACATCT <u>CC</u> TTAG <u>CTGCGGCC</u> ATATA <u>CACCGT</u> AACCAACCAC
CrmD51	D35A/Y36A	CCC <u>ATTAATGGGAA</u> ATGTAA <u>CGGTACAGCG</u> C <u>TAACAGT</u> AA <u>ATATCGT</u> GTAAACAA
CrmD52	D35A/Y36A	TTGTTTACA <u>ACATAGATT</u> ACTGTT <u>AGCGG</u> CTGTACCGTTAC <u>TTCCC</u> ATTA <u>ATGGG</u>
CrmD53	F72A/T73A/S74A	GACA <u>AGTGCC</u> CAGATGAC <u>ACCCG</u> <u>CTGCAG</u> CCATT <u>CTTAATCGT</u> CTCCGCGTGTCTAAGT
CrmD54	F72A/T73A/S74A	CGGG <u>ACTATGATTAGG</u> A <u>ATGGC</u> <u>CTGCAG</u> CGGTGT <u>CATCTGGG</u> ACTTGTC
CrmD55	H78A/S79A	CCC <u>CAGATGAC</u> CC <u>TTACATCC</u> ATT <u>CCCTAA</u> <u>ATGCTG</u> CTCCGCGTGTCTAAGT
CrmD56	H78A/S79A	ACTTAGAC <u>ACCGGG</u> <u>AGCAG</u> CATTAGGA <u>ATGG</u> ATGTA <u>AGGT</u> GT <u>CTCGG</u>
CrmD57	R86A/K86A	TA <u>GTCCCG</u> GT <u>CTCAAG</u> TTG <u>TCAGGCG</u> <u>CATG</u> GT <u>AGCAG</u> TA <u>ATCAAGT</u> AGAG
CrmD58	R86A/K86A	CT <u>CTACTG</u> ATT <u>ACTG</u> CT <u>ACATGCC</u> <u>CTGCACAA</u> ACT <u>AGAC</u> CGGGGACTA
CrmD59	S90A/S91A	GTGT <u>CTAA</u> <u>GGT</u> CG <u>AGG</u> CAA <u>ATGT</u> <u>GCC</u> C <u>TAATCA</u> <u>AGT</u> AGAG <u>ACTAA</u> <u>ATCGT</u> G
CrmD60	S90A/S91A	ACACG <u>ATTTAGT</u> CT <u>ACTT</u> G <u>ATTAGCG</u> <u>GCAC</u> ATTG <u>CCCTCG</u> AC <u>AACT</u> AGACAC
CrmD61	E116A/F117A/E118A	TG <u>CATCCGG</u> A <u>ACTACTG</u> CC <u>AGCTGCAGG</u> AT <u>CAAACGG</u> TTG <u>CGAGG</u> C
CrmD62	E116A/F117A/E118A	GC <u>CTGCAACCG</u> TTG <u>ATCCTG</u> C <u>AGCTGCC</u> AG <u>TAGT</u> AT <u>CCGG</u> ATG <u>CGA</u>
CrmD63	D146A/I148A	GT <u>ATATGG</u> CT <u>ACTCAT</u> <u>CTAAAGGAG</u> <u>CTGTAG</u> C <u>ATGT</u> AAA <u>AGT</u> GT <u>CCGG</u> TA <u>ATATA</u>
CrmD64	D146A/I148A	T <u>ATATTACCGG</u> AC <u>ACTTT</u> AC <u>ATGCT</u> <u>ACAGCT</u> CC <u>TTAG</u> AT <u>GAGT</u> AG <u>CC</u> AT <u>ATAC</u>

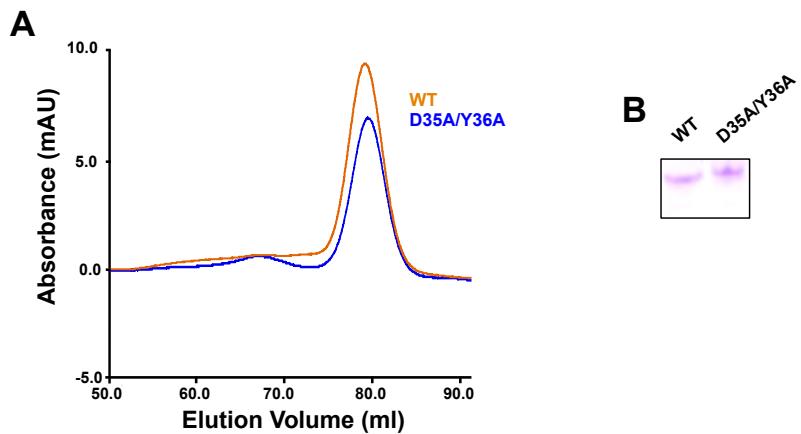


Figure S1. CrmD D35A/Y36A mutant displays the same oligomeric state than wild type CrmD. The oligomeric state of wild type CrmD (WT) and the CRD1 mutant D35A/Y36A was compared by size exclusion chromatography (A) and electrophoresis in native gel (B). In A, 100 µg of WT (orange) and D35A/Y36A (blue) CrmD mutant in 1 ml of PBS were eluted in a Superdex 200 gel filtration column. In B, 500 ng of WT and D35A/Y36A were analyzed in a native gel using the PhastGel System. Proteins were loaded in a 12.5% homogeneous gel with native buffer strips. Subsequently, the gel was stained with coomassie blue.