Underpinning EPR data summary - manuscript

Figure	Part	Description	Data files			
			Raw data name	File type	Processed data name	File type
2	G top	a) Distance distr. (95% conf. interval) for MscS D67R1, CD to lipid ratio 12:1, 16 hours	220601_KAq195.9_DEER_208032_66pc_pi	DSC/DTA	distr_DEERNet_D67_bCD60mM_norm	DAT
		b) Distance distr. (95% conf. interval) for MscS D67R1, CD to lipid ratio 6:1, 16 hours	220531_KAq195.6_DEER_208032_66pc_pi	DSC/DTA	distr_DEERNet_D67_bCD30mM_norm	DAT
		c) Distance distr. (95% conf. interval) for MscS D67R1, CD to lipid ratio 2:1, 16 hours	220602_KAq195.12_DEER_208032_66pc_pi	DSC/DTA	distr_DEERNet_D67_bCD10mM16h_norm	DAT
		d) Distance distr. (95% conf. interval) for MscS D67R1, CD to lipid ratio 2:1, 4 hours	220603_KAq195.15_DEER_208032_66pc_pi	DSC/DTA	distr_DEERNet_D67_bCD10mM04h_norm	DAT
		e) Distance distr. (95% conf. interval) for MscS D67R1, control (no CD)	220530_KAq195.3_DEER_208032_66pc_pi	DSC/DTA	distr_DEERNet_D67_control_norm	DAT
		DS) Modelled distance distribution for MscS D67R1 desensitised state	n.a.	DSC/DTA		
		FO) Modelled distance distribution for MscS D67R1 fully open state	n.a.	DSC/DTA	distrsD67tight_HR_final	DAT
		S) Modelled distance distribution for MscS D67R1 subconducting state	n.a.	DSC/DTA		
		C) Modelled distance distribution for MscS D67R1 closed state	n.a.	DSC/DTA		
	G middle	Cyan) Raw PELDOR trace for MscS D67R1, CD to lipid ratio 12:1, 16 hours	220601_KAq195.9_DEER_208032_66pc_pi	DSC/DTA	D67_bCD60mM_norm	DAT
		Blue) Raw PELDOR trace for MscS D67R1, CD to lipid ratio 6:1, 16 hours	220531_KAq195.6_DEER_208032_66pc_pi	DSC/DTA	D67_bCD30mM_norm	DAT
		Green) Raw PELDOR trace for MscS D67R1, CD to lipid ratio 2:1, 16 hours	220602_KAq195.12_DEER_208032_66pc_pi	DSC/DTA	D67_bCD10mM16h_norm	DAT
		Red) Raw PELDOR trace for MscS D67R1, CD to lipid ratio 2:1, 4 hours	220603_KAq195.15_DEER_208032_66pc_pi	DSC/DTA	D67_bCD10mM04h_norm	DAT
		Black) Raw PELDOR trace for MscS D67R1, control (no CD)	220530_KAq195.3_DEER_208032_66pc_pi	DSC/DTA	D67_control_norm	DAT
	G bottom	Grey) Modelled D67 trace scaled with experimental modulation depth from control for 100% closed state				
		Light grey) Modelled D67 trace scaled with experimental modulation depth from control for 25% subconducting state	n.a.	n.a.	signals_simD67tight_HR_final_perc	DAT
		Rose) Modelled D67 trace scaled with experimental modulation depth from control for 50% subconducting state				
		Purple) Modelled D67 trace scaled with experimental modulation depth from control for 75% subconducting state				
	H top	a) Distance distr. (95% conf. interval) for MscS M47R1, CD to lipid ratio 12:1, 16 hours	220707_BEBQ71.97_DEER	DSC/DTA	distr_DEERNet_M47_60mM_norm	DAT
		b) Distance distr. (95% conf. interval) for MscS M47R1, CD to lipid ratio 6:1, 16 hours	220705_BEBQ71.89_DEER	DSC/DTA	distr_DEERNet_M47_30mM_norm	DAT
		c) Distance distr. (95% conf. interval) for MscS M47R1, CD to lipid ratio 2:1, 16 hours	220705_BEBQ71.77_DEER	DSC/DTA	distr_DEERNet_M47_10mM16h_norm	DAT
		d) Distance distr. (95% conf. interval) for MscS M47R1, CD to lipid ratio 2:1, 4 hours	220703_BEBQ71.67_DEER	DSC/DTA	distr_DEERNet_M47_10mM04h_norm	DAT
		e) Distance distr. (95% conf. interval) for MscS M47R1, control (no CD)	220703_BEBQ71.58_DEER	DSC/DTA	distr_DEERNet_M47_control_norm	DAT
		DS) Modelled distance distribution forMscS M47R1 desensitised state				
		FO) Modelled distance distribution forMscS M47R1 fully open state	n.a.	n.a.	distrsM47tight_HR_final	DAT
		S) Modelled distance distribution forMscS M47R1 subconducting state				
		C) Modelled distance distribution forMscS M47R1 closed state				
	H middle	Cyan) Raw PELDOR trace for MscS M47R1, CD to lipid ratio 12:1, 16 hours	220707_BEBQ71.97_DEER	DSC/DTA	M4760mM_norm	DAT
		Blue) Raw PELDOR trace for MscS M47R1, CD to lipid ratio 6:1, 16 hours	220705_BEBQ71.89_DEER	DSC/DTA	M4730mM_norm	DAT
		Green) Raw PELDOR trace for MscS M47R1, CD to lipid ratio 2:1, 16 hours	220705_BEBQ71.77_DEER	DSC/DTA	M4710mM16h_norm	DAT
		Red) Raw PELDOR trace for MscS M47R1, CD to lipid ratio 2:1, 4 hours	220703_BEBQ71.67_DEER	DSC/DTA	M4710mM4h_norm	DAT
		Black) Raw PELDOR trace for MscS M47R1, control (no CD)	220703_BEBQ71.58_DEER	DSC/DTA	M47_control_norm	DAT
	H bottom	Grey) Modelled M47 trace scaled with experimental modulation depth from control for 100% closed state				
		Light grey) Modelled M47 trace scaled with experimental modulation depth from control for 25% subconducting state	n.a.	n.a.	signals_simM47tight_HR_final_perc	DAT
		Rose) Modelled M47 trace scaled with experimental modulation depth from control for 50% subconducting state				
		Purple) Modelled M47 trace scaled with experimental modulation depth from control for 75% subconducting state				

Underpinning EPR data summary - electronic supplementary information

Figure	Part	Description	Data files			
			Raw data name	File type	Processed data name	File type
S3	A	Orange) Modelled traces for MscS D67R1 desensitised state				
		Cyan) Modelled traces for MscS D67R1 fully open state	n.a.	n.a.	S3A_signals_simD67tight_HR_final	DAT
		Purple) Modelled traces for MscS D67R1 subconducting state				
		Grey) Modelled traces for MscS D67R1 closed state				
	B	Orange) Modelled traces for MscS M47R1 desensitised state				
		Cyan) Modelled traces for MscS M47R1 fully open state	n.a.	n.a.	S3B_signals_simM47tight_HR_final	DAT
		Purple) Modelled traces for MscS M47R1 subconducting state				
		Grey) Modelled traces for MscS M47R1 closed state				
	C	Orange) Modelled distance distribution for MscS D67R1 desensitised state	n.a.	n.a.	S3C_E_distrsD67tight_HR_final, column I	DAT
		Cyan) Modelled distance distribution for MscS D67R1 fully open state			S3C_E_distrsD67tight_HR_final, column H	DAT
		Purple) Modelled distance distribution for MscS D67R1 subconducting state			S3C_E_distrsD67tight_HR_final, column G	DAT
		Grey) Modelled distance distribution for MscS D67R1 closed state			S3C_E_distrsD67tight_HR_final, column F	DAT
	D	Orange) Modelled distance distribution for MscS M47R1 desensitised state	n.a.	n.a.	S3D_F_distrsM47tight_HR_final, column I	DAT
		Cyan) Modelled distance distribution for MscS M47R1 fully open state			S3D_F_distrsM47tight_HR_final, column H	DAT
		Purple) Modelled distance distribution for MscS M47R1 subconducting state			S3D_F_distrsM47tight_HR_final, column G	DAT
		Grey) Modelled distance distribution for MscS M47R1 closed state			S3D_F_distrsM47tight_HR_final, column F	DAT
		Grey) Modelled D67 distance distribution scaled with experimental modulation depth from control for 100% closed state			S3C_E_distrsD67tight_HR_final, column F	DAT

	E	Light grey) Modelled D67 distance distribution scaled with experimental modulation depth from control for 25% subconducting state	n.a.	n.a.	S3C_E_distrsD67tight_HR_final, column J	DAT
		Rose) Modelled D67 distance distribution scaled with experimental modulation depth from control for 50% subconducting state			S3C_E_distrsD67tight_HR_final, column K	DAT
		Purple) Modelled D67 distance distribution scaled with experimental modulation depth from control for 75% subconducting state			S3C_E_distrsD67tight_HR_final, column L	DAT
		Dark purple) Modelled D67 distance distribution scaled with experimental modulation depth from control for 100% subconducting state			S3C_E_distrsD67tight_HR_final, column G	DAT
	F	Grey) Modelled M47 distance distribution scaled with experimental modulation depth from control for 100% closed state	n.a.	n.a.	S3D_F_distrsM47tight_HR_final, column F	DAT
		Light grey) Modelled M47 distance distribution scaled with experimental modulation depth from control for 25% subconducting state			S3D_F_distrsM47tight_HR_final, column J	DAT
		Rose) Modelled M47 distance distribution scaled with experimental modulation depth from control for 50% subconducting state			S3D_F_distrsM47tight_HR_final, column K	DAT
		Purple) Modelled M47 distance distribution scaled with experimental modulation depth from control for 75% subconducting state			S3D_F_distrsM47tight_HR_final, column L	DAT
		Dark purple) Modelled M47 distance distribution scaled with experimental modulation depth from control for 100% subconducting state			S3D_F_distrsM47tight_HR_final, column G	DAT