

**Supporting Fig. S13. Alignment comparing the amino acid sequences of the D2 and Q1SX chimeras, highlighting the Lci3 repeats missing from Q1SX.**  
The repeats found in D2, but missing from Q1SX are boxed

Q1SX	MAKKLLFAIP	LVVPFYSETM	ASMTGCGQMC	R-----	-----MIEAEE	QARREAEQA	RRVAEEQARR	EAEQARREV	67
D2	MR	GSHHHHEG	ASMTGCGQMC	ROIYDDDDKD	RWGSEIEAEE	QARREAEQA	RRVAEEQARR	EAEQARREV	72
Q1SX	ELEEKLRGTE	ARAAELAARL	KATAAMKASM	VQERESARDA	LEEKLRGSEV	RAAELAARLK	AAVAAKSSAE	QDRENTRTL	147
D2	ELEEKLRGTE	ARAAELAARL	KATAAMKASM	VQERESARDA	LEEKLRGSEV	RAAELAARLK	AAVAAKSSAE	QDRENTRTL	152
Q1SX	EQRLESEER	AAELASQLEA	AAAAKSSAEQ	DRENTRAALE	EKLKGSEERA	AELGTRVKAS	SAAKALAEQE	RDRIRAALEE	227
D2	EQRLESEER	AAELASQLEA	AAAAKSSAEQ	DRENTRAALE	EKLKGSEERA	AELGTRVKAS	SAAKALAEQE	RDRIRAALEE	232
Q1SX	KLRDSEARAA	ELTTKLEATV	AAKSSAEQER	ENIKVAVE--	-----	-----	-----	-----	265
D2	KLRDSEARAA	ELTTKLEATV	AAKSSAEQER	ENIKVAVEEL	QKAQEDGERQ	KADNRQLASD	NERLATELER	AQEEAERLAG	312
Q1SX	-----	-----	-----	-----	-----	-----	-----	-----	291
D2	DLEKAESEAE	RLAGDLEKAO	EEAETLAGEL	QKAQEDGERQ	KADNRQLASD	NERLATELER	AQEEAERLAG	DLEKAESEAE	392
Q1SX	RLAGDLEKAO	EEAETLAGVN	ELADKDPELA	AFREKRRAAH	GARADEPELA	AADGISTRNA	RAGSRGRPAA	QINPAEAVD	371
D2	RLAGDLEKAO	EEAETLAGVD	ELADKDPELA	AFREKRRAAH	GARADEPELA	AADGISTRNA	RAGSRGRPAA	QINPAEAVD	472
Q1SX	PVTIAAEPLY	AVTLDEYKAK	QTALENAVEV	ACAAEETVKE	KLRENSDLMV	ELEKVRDQAY	EMDRRRQEDC	AAMEGELLVV	451
D2	PVTIAAEPLY	AVTLDEYKAK	QTALENAVEV	ACAAEETVKE	KLRENSDLMV	ELEKVRDQAY	EMDRRRQEDC	AAMEGELLVV	552
Q1SX	LMELKKIKGI	NDALLAVLRD	KECEVKELRY	HNELWVDPTG	DKKQVVTRHT	KIFDCNWERI	VRERPEGLFA	AFVIDSSNAC	531
D2	LMELKKIKGI	NDALLAVLRD	KECEVKELRY	HNELWVDPTG	DKKQVVTRHT	KIFDCNWERI	VRERPEGLFA	AFVIDSSNAC	632
Q1SX	HVPGDNIKQV	SFDHDSHHHH	H	552					
D2	HVPGDNIKQV	SFDHDEFEA		651					