## **Supplementary figure legends**

**Figure S1.** The interaction between labeled SibC and unlabeled *ibsC* mRNA. The RNase V1 cleavage levels in Fig. 6, lanes 1 and 3 are denoted on the secondary structure model of SibC by the thickness of the arrows.

**Figure S2.** The interaction between labeled SibC and unlabeled *ibsC* mRNA. The RNase T1 cleavage levels in Fig. 6, lanes 5 and 7 are denoted as in Fig. S1.

**Figure S3.** The interaction between labeled SibC and unlabeled *ibsC* mRNA. The lead(II) cleavage levels in Fig. 6, lanes 9 and 11 are denoted as in Fig. S1.

**Figure S4.** The interaction between labeled SibC and unlabeled *ibsC* mRNA. The RNase III cleavage levels in Fig. 6, lanes 13 and 15 are denoted as in Fig. S1.

**Figure S5.** The interaction between labeled *ibsC* mRNA and unlabeled SibC RNA. The RNase V1 cleavage levels in Fig. 7, lanes 1 and 3 are denoted on the secondary structure model of *ibsC* mRNA by the thickness of the arrows.

**Figure S6.** The interaction between labeled *ibsC* mRNA and unlabeled SibC RNA. The RNase T1 cleavage levels in Fig. 7, lanes 5 and 7 are denoted as in Fig. S5.

**Figure S7.** The interaction between labeled *ibsC* mRNA and unlabeled SibC RNA. The lead(II) cleavage levels in Fig. 7, lanes 9 and 11 are denoted as in Fig. S5.

**Figure S8.** The interaction between labeled *ibsC* mRNA and unlabeled SibC RNA. The RNase III cleavage levels in Fig. 7, lanes 13 and 15 are denoted as in Fig. S5.

**Figure S9.** Time course of the interactions between SibC and *ibsC* mRNA. Structural probing data in Fig. 7 were compared for zero time, 1 sec, and 360 sec. The RNase V1 cleavage levels are denoted on the secondary structure model of *ibsC* mRNA by the thickness of the arrows

**Figure S10**. Comparison of five Sib RNA sequences. (A) A comparison of sequences in all five Sib RNAs. (B) A pair-wise comparison of two Sib RNAs among five Sib RNAs. The similarities between them are shown in the left.

SibC





Fig. S1 (Han et al.)







Fig. S2 (Han et al.)





Fig. S3 (Han et al.)







Fig. S4 (Han et al.)







Fig. S5 (Han et al.)







Fig. S6 (Han et al.)



Pb(II)



100 nM



Fig. S7 (Han et al.)







Fig. S8 (Han et al.)





Fig. S9 (Han et al.)

Α

	TRD1				
sibA	AGGGTTAGGGAGAGGTTTCCCCCCCCCCGGTGTTCTTAGTAAGCCTGGAAGCTA 56				
sibB	AGGGTAGAGCGGGGTTTCCCCCGCCCTGGTAGTCTTAGTAAGCGGGGAAGCTT 53				
sibC	AAGGGTAAGGGAGGATTGCTCCTCCCCTGAGACTGACTGTTAATAAGCGCTGAAACTT 58				
sibD	ACAAGGGTGAGGGAGGATTTCTCC-CCCCTCTGATTGGCTGTTAATAAGCTGCGAAACTT 59				
sibE	ACAAGGGTAAGGGAGGATTTCTCCCCCCT-CTGATGAGTTGTTAGTAAGTCGGGAAACTT 59				
	** * * * ** ** ** * * * ************				
	TRD2				
sibA	ATCACTAAGAGTATCACCAGTATGATGACGTGCTTCATCATAACCCTTTCCTTATTAAAA 116				
sibB	ATGACTAAGAGCACCACGATGATGAGTAGCTTCATCATGACCCTTTCCTTATTTAT				
sibC	ATGAGTAACAGTACAATCAGTATGATGACAAGTCGCATCATAACCCTTCTCCTTCAAG 116				
sibD	ACGAGTAACAACAATCAGTATGATGACGAGCTTCATCATAACCCTTTCCTTCTGTAAG 119				
sibE	AACAGTAACAACAACCAGTATGATGACGAGCTTCATCATAACCCTTTCCTTATACAAG 119				
	* * *** * * * * ****** * ****** ***** ** *				
sibA	GCCCTCTTCTCCGGGAGAGGCTTTCCC 143				
sibB	GCCC-CTTCCTCGGGAGGGGCTTTCCC 136				

sibA	GCCCTCTTCTCCGGGAGAGGCTTTCCC	143
sibB	GCCC-CTTCCTCGGGAGGGGCTTTCCC	136
sibC	CCCTCGCTTCGGTGAGGGCTTTACC	141
sibD	GCCCCCTTCTTCGGGAGGGGCTTTCCC	146
sibE	GCCC-CTTCTTCGGGAGGGGCTTTCCC	145
	** * *** *****	

В

		TRD1	TRD2
90%	sibD	ACAAGGGTGAGGAGGATTICTCCCCCCCTCTGATTGGCTGTIAATAAGCTGCGAJACTTA CGAGTAACAACCACAAT	AGTATGATGACGASCTICATCATAATAACCCTITICCTICTGTAAGGCCCCCTICTICGGGAGGGGCTITCCC
	sibE	ACAAGGGTAAGGAGGAGATTCCCCCCCCTCTGATGAGTTGTTAGTAAGTA	AGTATGATGACGAAGCTICATCATAACCCTITICCTTATACAAGGCCCC-TICITCGGGAGGGGCTITCCC
82%	sibC	NAGSGIAASGGAGGAITGCTCCTCCCCCGGACGACIGACIGTIAAINAGCGCTGAUACTIAIGAGIAACAGIACAAICA	БТАТGАГGАСХАGГСССАТСАТТААСССТТСТССТГСАЙGСССТСССТГССБСТБАБGGCTTTACC
	sibD	ACAAGSGIGAGGGAGAITICCCC-CCCCCGGAITGCCGIIAAINAGCIGGAAACTIACGAGIAACAAAAA	БТАТGАГGАGGAGCTTCATCATAACCCTTCCTTCTBTAAG GCCCCCTTCTTCGGGAGGGGCTTTACC
82%	sibA	AGGGTTAGGGAGAGGTTICCCCCCCCCCGGTGTICTTAGTAGCCCGGAAGCTAATCACTAAGAGTAIC	ACCAGIAIGALGALGGIGCIICAICAIAACCCTIICCIIAIIAAAAGCCCICIICICGGGAGAGGCIIICCC
	sibB	-AGGGTAGAGCGGGGTTCCCCCCCCCTGGTAGTCTTAGTAAGCGGGGAAGCTTATGACTAAGAGC	ACCACGAIGAIGAGIAGCIICAICAIGACCCIIICCIIAIIIAI
81%	sibA	>ASSSTIASSSASASSTITCCCCCTCCCCCTGSTSTICTIASTAASCCTSSASCTAATCACTAASASTATCAC	автатвалбаловостологатаассоттосстватаааа осстотогосовоаваевстгосс
	sibE	ACAASSSTAASSSASSTITCTCCCCCCTCTSATSASTISTIASTAASTCOSSAACTTAACASTAACAACAACA	автатвалбасевестгологатаассоттостват-асаае оссотостоовоаевестгосс
80%	sibB	agggtagagggggtticccccccc-ctogtagicttagtagcggggagcttatgactagaggaggc	алтбалбаларстіслісалалсстітістілітілібе сосстісстоведарарастітосс
	sibE	Acagggtagggaggatticcccccccctigatggstgtagtaggtagggaggtagctaacaacaacaacaacaacaacaacaacaacaacaacaa	саяталаларардаратіслісліласостітістілісларе осостістісбедарарастітосс
79%	sibB sibD		CACGAIGAIGAGIAGCTICAICAIGACCCTIICCTIAITIAIGG CCCC-IICCICGGGAGGGGCCIIICCC CAEIAIGAIGAGCAGCIICAICAIGACCCIIICCIICIGIAAGG CCCCIICIICGGGAGGGGCIIICCC
78%	sibC sibE	NAGGGTALGGGAGGATTOCTCCCCCCCCGAGACCGACCGTTAATAAGCGCCGAAACTT ATGAGTAACAAGTAACAACAAAAC ACAAGGGTALGGGAGGAGATTICCCC-CCCCCCGATGAGTIGTTAGTAAGTCGGGAAACTT AACAAGTAACAACAACAAC	летателлелсялетсесятся. Такателлелсялется такассстве сторон в сосстоентеретелерон поста аралеалейся в сосствется в сосст
77%	sibA sibD	assestiassestificcccciccccigeistictiastasscctsasctaatcactaasastaacaacacaac	AGTATGAIGACGIGCTICAICATAACCCTITECITAITAAAAGCCCTCIICICCOGGGAGAGGCIIICCC AGTAIGAIGAGCTICAICAIAACCCIIICCIICIGIAAGGCCCCCIICIICGGGAGGGGCIIICCC
72%	sibA	ABSGITAGSGASASGITICCCCCTCCCCCTGGI-GITCITAGIASCCIGGASCIAICACIAAGAGIAICACAA	TATGATGACGAGCTCATCATAACCCCTTTCCTTATTAAAGCCCTCTTCCGGGAGAGGGCTTICCC
	sibC	AAGGIAAGGASGAITCCCCCCCCGASCIGALIGIIAAIAAGGCIGAACIIAIGAGIAACAGIACAAICA	TATGATGACGAGCCGCATCATAACCCTTCCTTCAAGCCCTCG-CTTCGGTGAGGGCTTTACC
68%	sibB	-AggstarageorgstitcccceecctrgtagicTiastargeorggaagettaigactargacaCa	CRATGATGAGAAGACTICATCATCACCCTTTCCTTATTTATGGCCCCCTICCTCGGGAGGGGCTITCCC
	sibC	Aaggstaaggargatigetectcccccerargetrgtattaregeorgaagettaigacagtacagtaca	FIATGATGACAAGTCGCATCATAACCCTTCTCCTCCAAGCCCTCGCTTCGGGAGGGGCTITACC

TRD1

Fig. S10 (Han et al.)