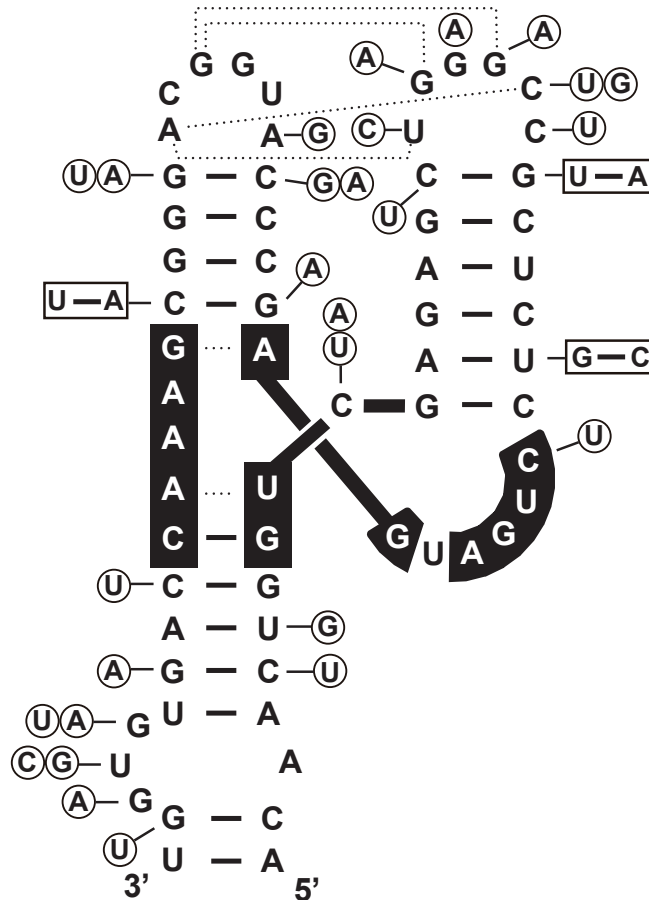


**A**

			1	10	20	30	40	50	60
gi	643709224	gb	KK915179.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643740268	gb	KK914224.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643739396	gb	KK914233.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643736170	gb	KK914294.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643728304	gb	KK914436.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643715065	gb	KK914853.1	ACAACTGGT	TGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643707405	gb	KK915321.1	ACAACTGGT	TGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643735628	gb	KK914309.1	ACAACTGGT	AGGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643741048	gb	KK914214.1	ACAACTGGT	TGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643715065	gb	KK914853.1	ACAACTGGT	TGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643729452	gb	KK914408.1	ACAACTGGT	CGGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643726030	gb	KK914502.1	ACAACTGGT	CGGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643740348	gb	KK914223.1	ACAACTGGT	CGGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643722379	gb	KK914589.1	ACAACTGGT	TGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643701409	gb	KK916171.1	ACAACTGGT	CGAGAGCTAGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643735948	gb	KK914299.1	ACAACTGGT	CGAGAGCTAGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
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gi	643715753	gb	KK914810.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643736170	gb	KK914294.1	ACAACTGGT	CGAGAGCTGGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643722520	gb	KK914582.1	ACAACTGGT	TGAGAGCTAGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
gi	643722520	gb	KK914582.1	ACAACTGGT	TGAGAGCTAGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	
<i>consensus</i> >70				ACAACTGGT	TGAGAGCTAGGCCGCTCTC	CTGATGAGCCCA	TGGCAGGGCGAAACCA	GTGTGGT	

**B**



### **Additional file 3.**

Hammerhead ribozymes in the genome of *Jatropha curcas*. **a** Sequence alignment of the 30 *bona fide* HHRs detected in the genome of *J. curcas* (Bioprojects: PRJNA63485 and PRJNA279873). Only 5 out of the 30 HHRs show identical sequences, whereas the other 25 motifs showed one or more changes. **b** Secondary structure of the *J. curcas* HHRs. Variable positions are indicated within circles (single changes) or boxes (co-variations). Conserved tertiary interactions between loops 1 and 2 are shown with dotted lines.