



Figure 5-figure supplement 2. Schematic detailing the process of adding an aptamer onto one loop of the ribozyme. A) The secondary structure of the aptamers used to design genetic switches. The portion surrounded by the dotted line is retained, while the uncircled portion (the stem leading up to the first bulge) is removed. B) The secondary structure of the hammerhead ribozyme, with the two loops showing. The portion surrounded by the dotted line is retained. In this example, loop I is removed, but it loop II could be removed if the aptamer was instead added to that region of the ribozyme. C) The workflow for adding the retained portion of the aptamer onto the retained portion of the ribozyme. The secondary structure of the final hammerhead ribozyme with an attached folinic acid aptamer (highlighted in green). The opposite loop (highlighted in grey) could contain random or designed nucleotides.