

Supplementary data

Sensing complex regulatory networks by conformationally controlled hairpin ribozymes

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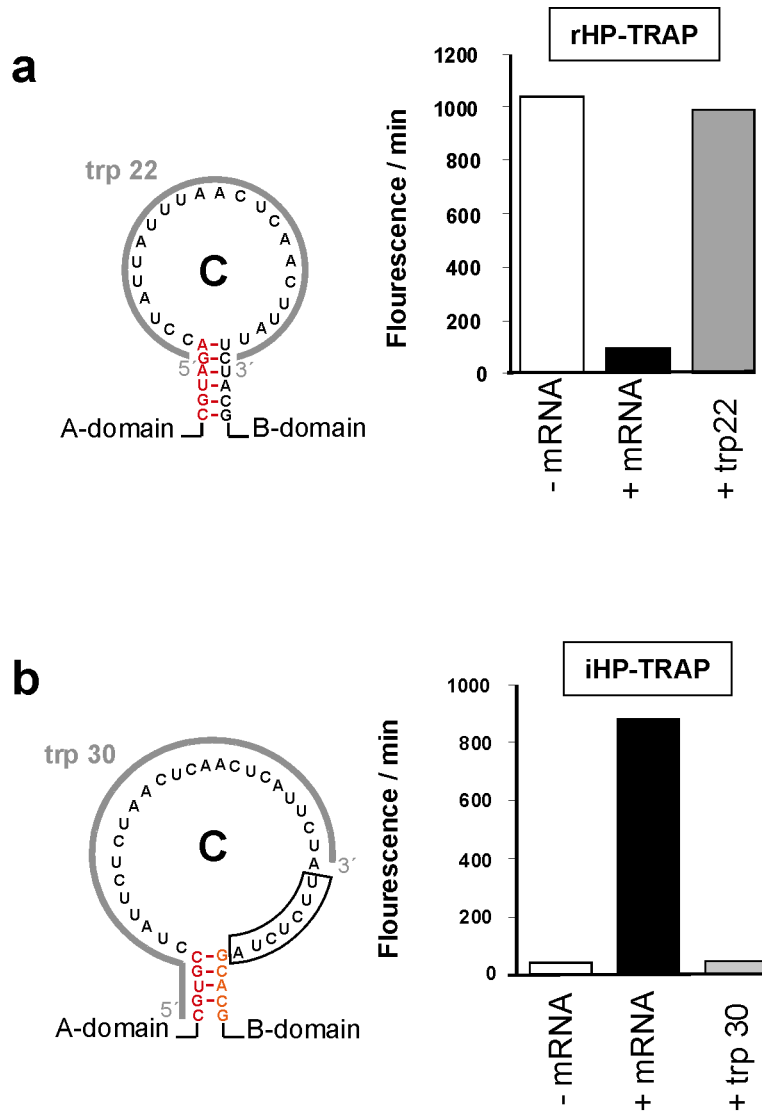


Fig. 1S Domain specific deactivation or activation of rHP-TRAP and iHP-TRAP by trp 22 and trp 30. (a) Annealing to the unpaired domain C loop alone cannot cause inhibition since it is not able to trigger the extended conformation. Only TCD co-annealing (black letters show the mRNA annealing region) can convert the stem loop structure of domain C into an RNA duplex as required for ribozyme inhibition. (b) trp 30 annealing to the TCD domain of iHP-TRAP seems to inhibit the formation of an active conformation, as expected. It triggers an extended conformation by distortion of the TCD domain required for half-pseudo-knot formation.

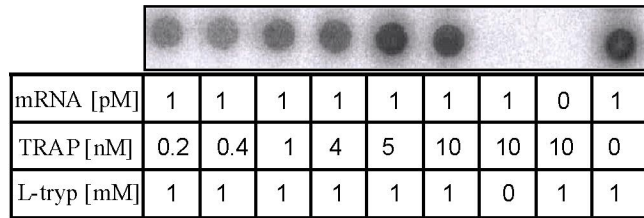
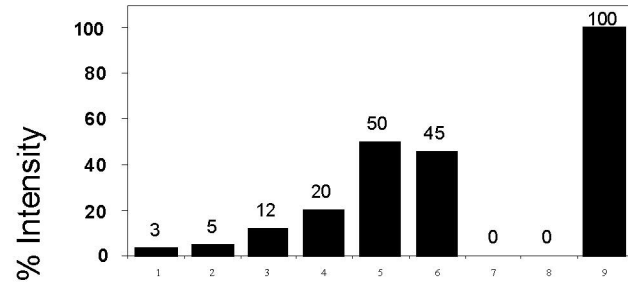


Fig. 2S Dot blot analysis of mRNA-TRAP binding.

Najafi et al. Supplementary Table S

Table S

Ribozyme	Turnover [min^{-1}]	
	no mRNA	+ mRNA
rHP-TRAP	0.16	0.02
iHP-TRAP	n.d.	0.23

n.d.: not detectable.