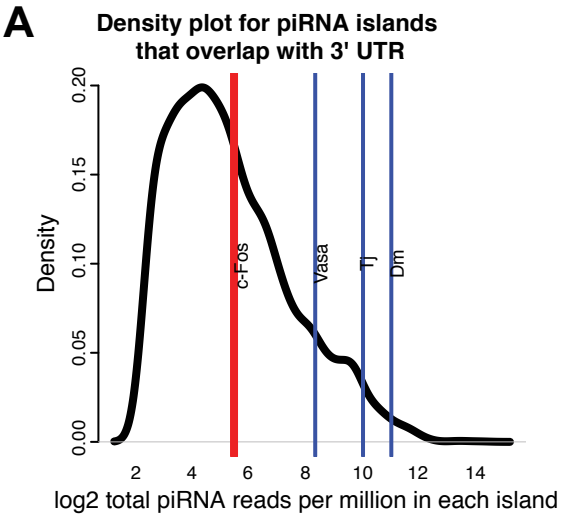
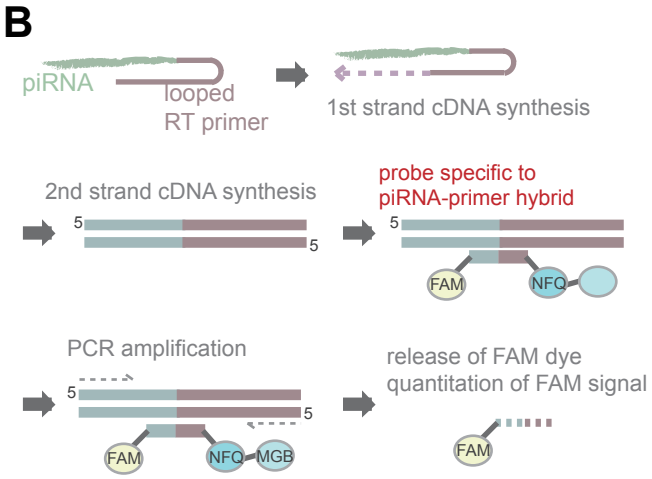
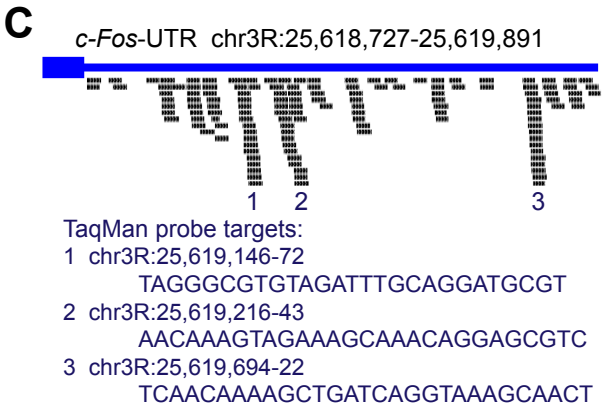
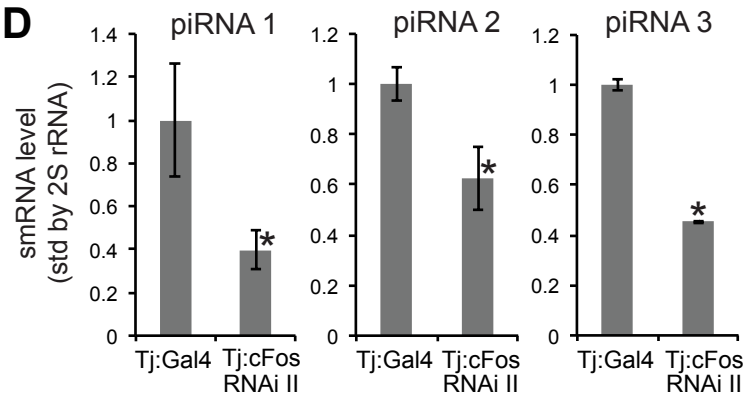
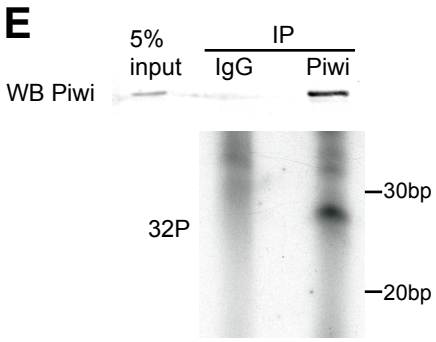

A
Density plot for piRNA islands
that overlap with 3' UTR
Density
0.00
0.05
0.10
0.15
0.20
c-Fos
Vasa
Tj
Dm
2
4
6
8
10
12
14
log2 total piRNA reads per million in each island


B
piRNA
looped
RT primer
1st strand cDNA synthesis
2nd strand cDNA synthesis
probe specific to
piRNA-primer hybrid
5
5
FAM
NFQ
PCR amplification
MGB
release of FAM dye
quantitation of FAM signal


C
c-Fos-UTR chr3R:25,618,727-25,619,891
1
2
3
TaqMan probe targets:
1 chr3R:25,619,146-72
TAGGGCGTGTAGATTTGCAGGATGCGT
2 chr3R:25,619,216-43
AACAAAGTAGAAAGCAAACAGGAGCGTC
3 chr3R:25,619,694-22
TCAACAAAAGCTGATCAGGTAAAGCAACT


D
piRNA 1
piRNA 2
piRNA 3
smRNA level
(std by 2S rRNA)
Tj:Gal4
Tj:cFos
RNAi II
*


E
5%
input
IP
IgG
Piwi
WB Piwi
32P
30bp
20bp