

Figure S10. Detailed analysis of piRNAs in *aub/CyO* and *aub^{HN2}/aub^{QC42}* ovaries. The figure presents the 95 transposon families for which we tallied > 500 piRNA reads in *ago3/TM6B*, plus the tandem repeat *mst40*.

(A, B) Sequence-bias plot (“sequence-excess logo”) for all piRNAs mapping to the transposon family (A) or for piRNAs with ping-pong partners (B). The graphs report only nucleotide biases significantly different from the intrinsic bias of the transposon family itself (see Supplemental Experimental Procedures). The gray bars indicate the maximum possible value for each position.

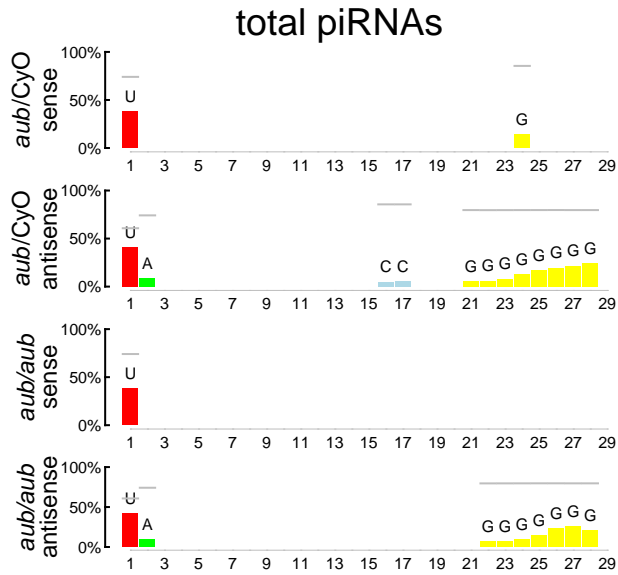
(C, D) The abundance (per million) of piRNAs (23–29 nt) in *aub/CyO* (C) and *aub^{HN2}/aub^{QC4}* ovaries (D) for each base-pair position of the transposon consensus sequence. Abundance was both normalized by the number of times a piRNA mapped to the genome and calibrated to the total abundance of sequences corresponding to non-coding RNAs in the sample. For each base, the total normalized abundance of piRNAs that fall on that position is reported. Here and below, blue denotes sense strand-mapping piRNAs; red, antisense-strand mapping piRNAs.

(E, F) Length distribution of 19–29 nt RNAs mapping to the transposon family for *aub/CyO* (E) and *aub^{HN2}/aub^{QC4}* ovaries (F). The number of reads was normalized as in (C) and (D).

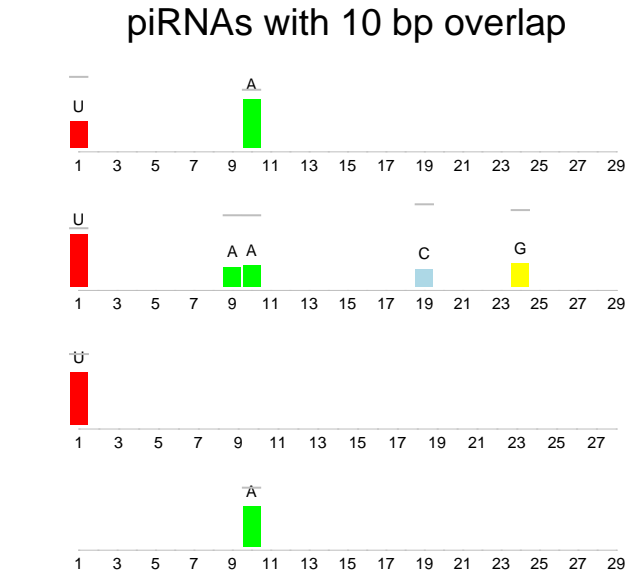
(G, H) Distribution of the length of 5′ overlaps between sense and antisense piRNAs mapped to the transposon family for *aub/CyO* (G) and *aub^{HN2}/aub^{QC4}* (H) ovaries. Only pairs that overlapped at their 5′ ends were included. A peak at 10 bp indicates ping-pong pairing.

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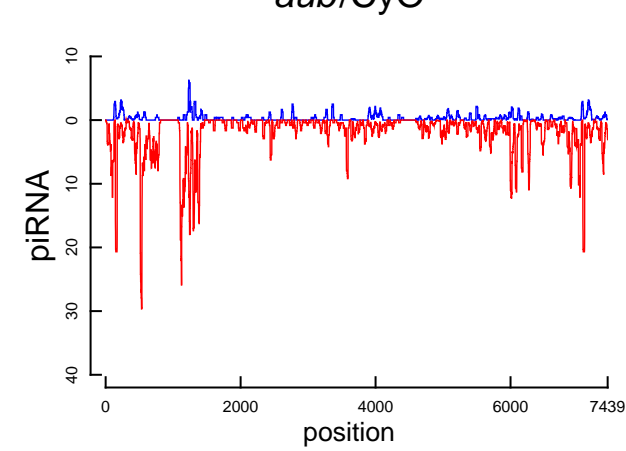
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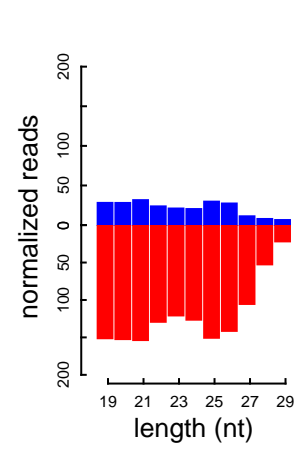
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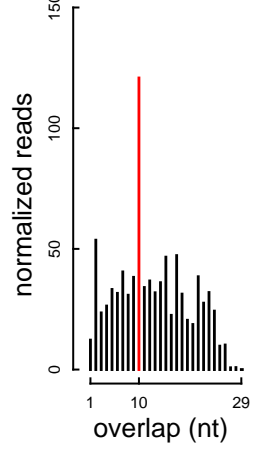
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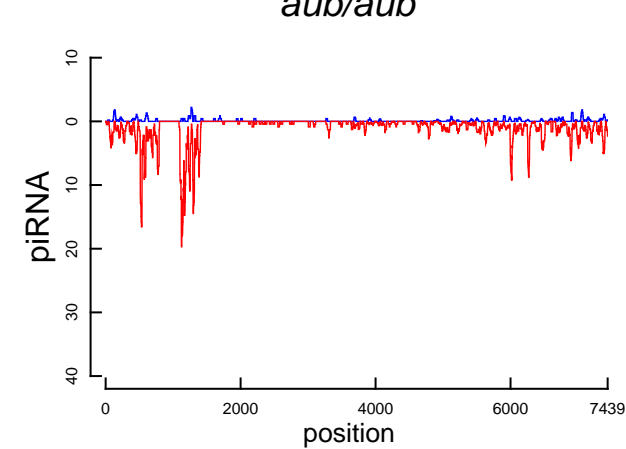
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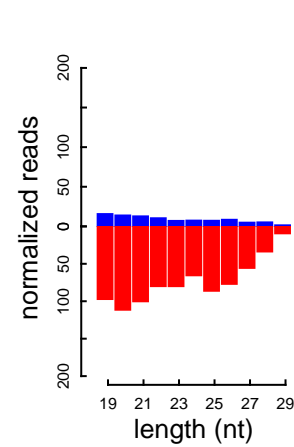
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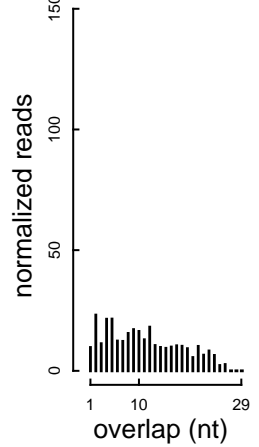
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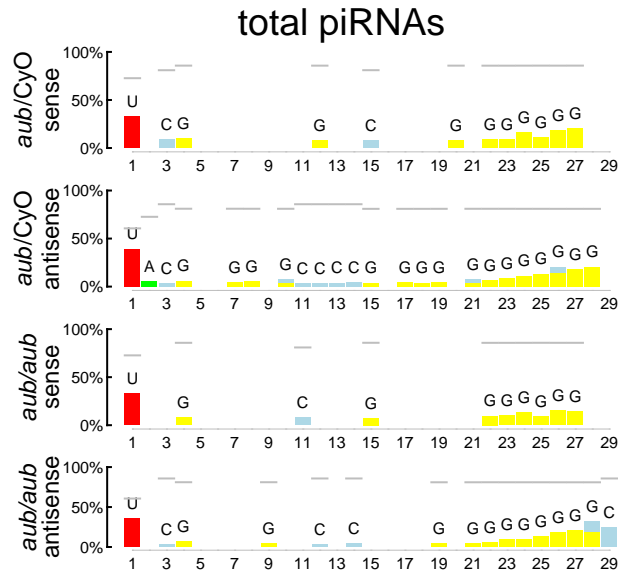
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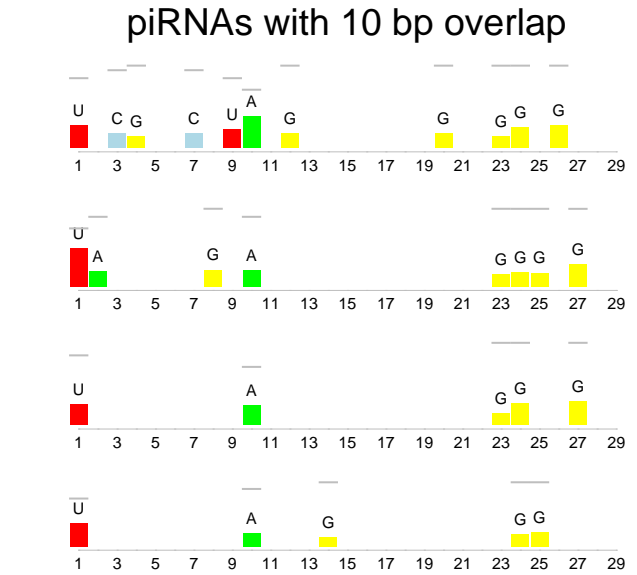
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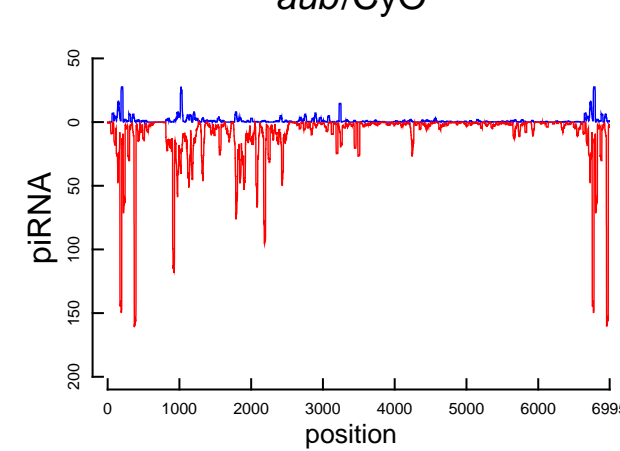
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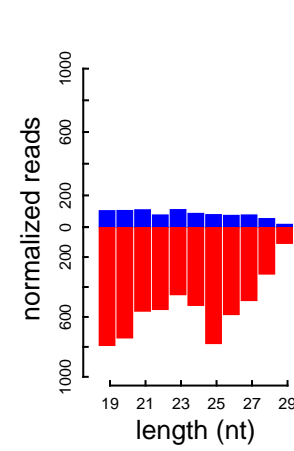
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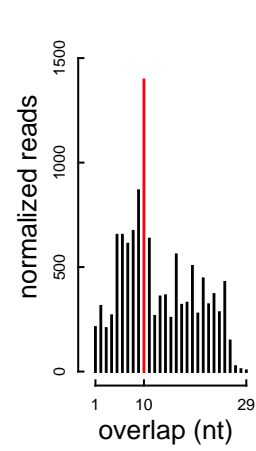
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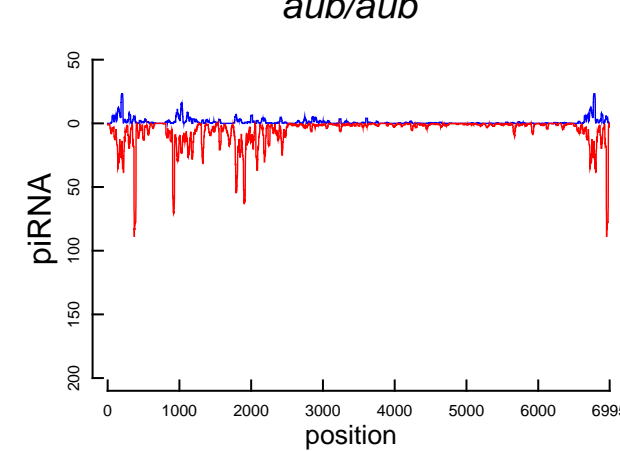
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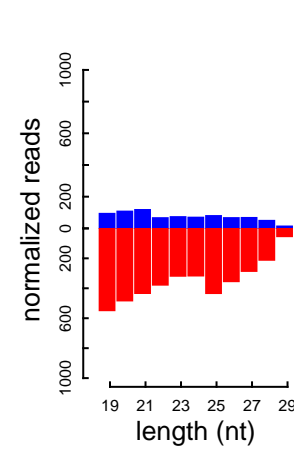
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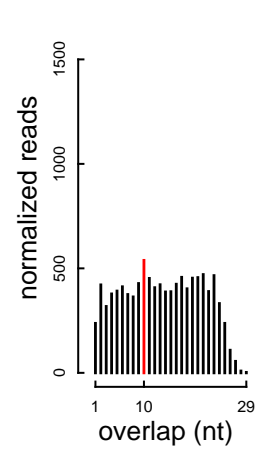
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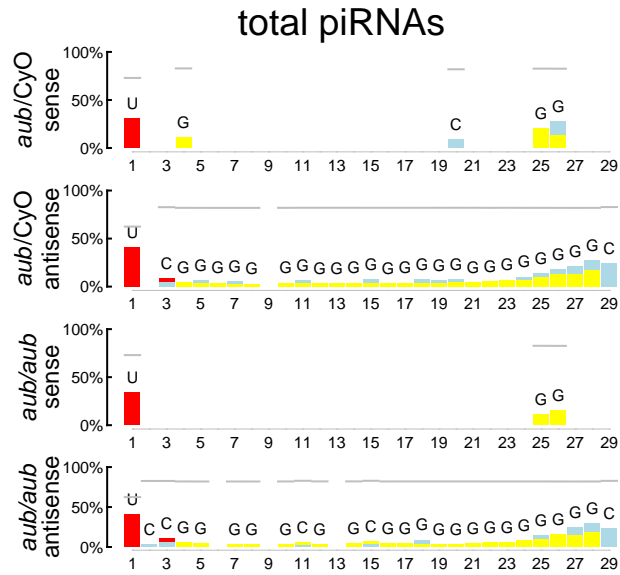
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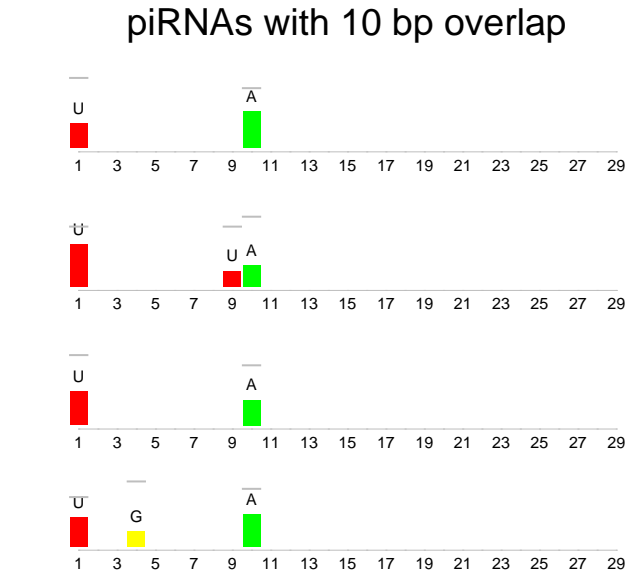
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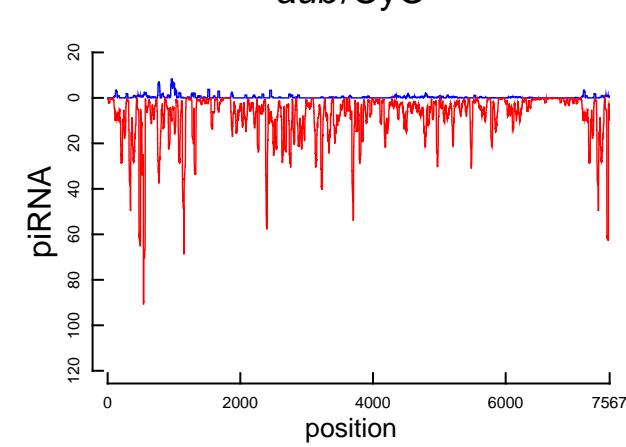
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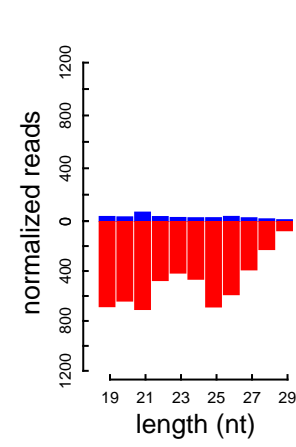
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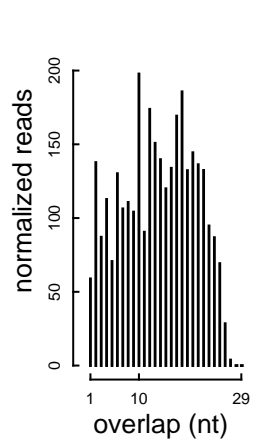
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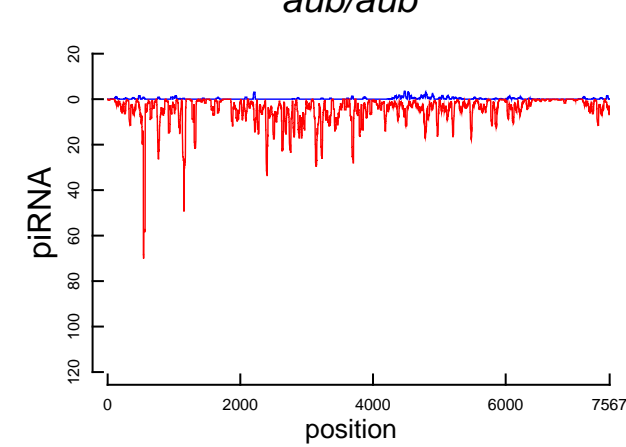
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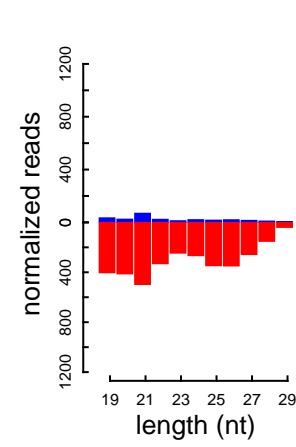
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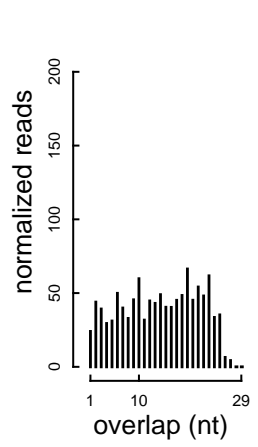
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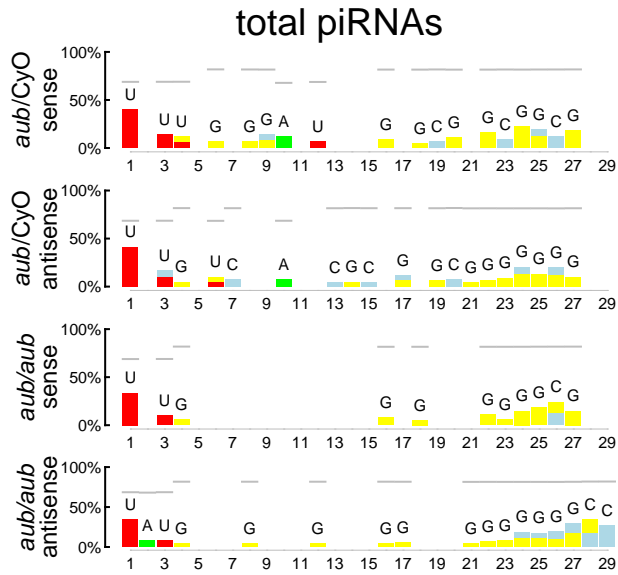
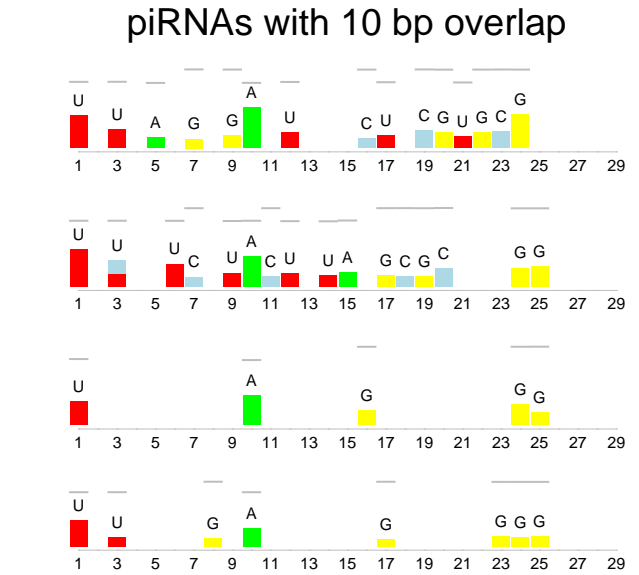
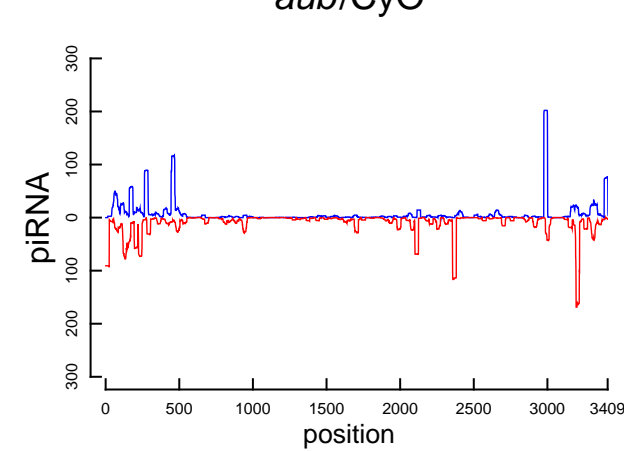
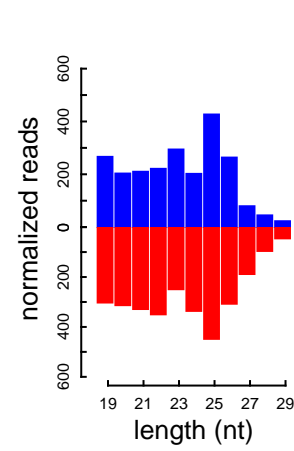
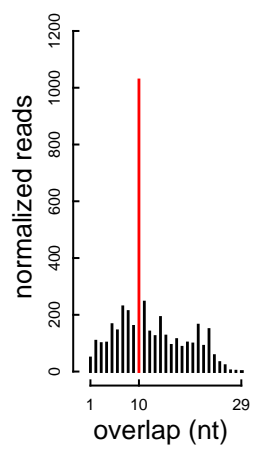
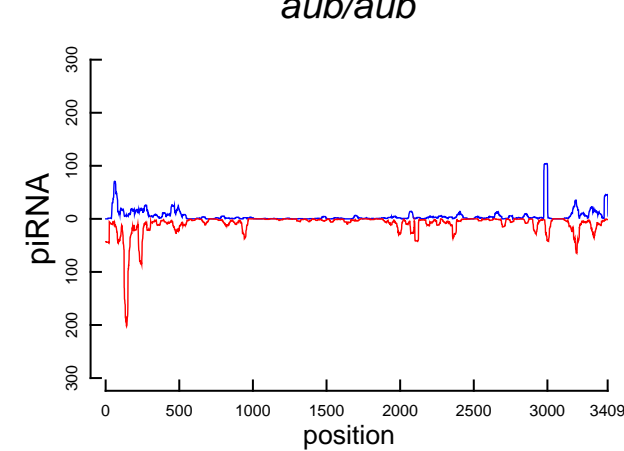
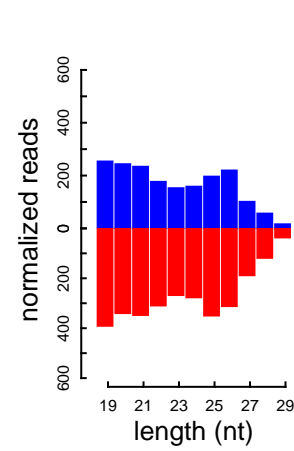
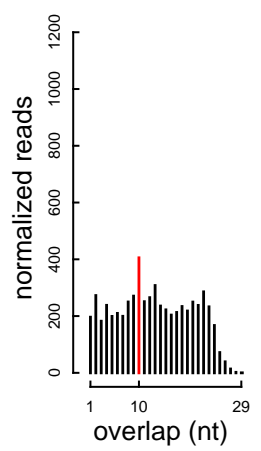
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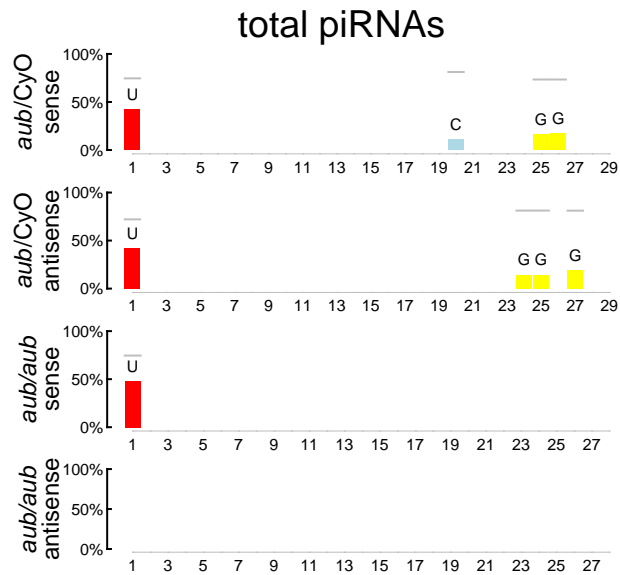
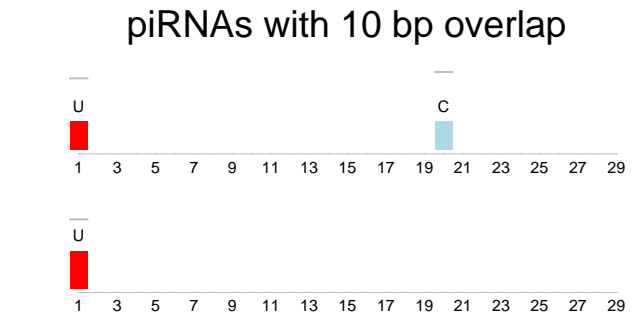
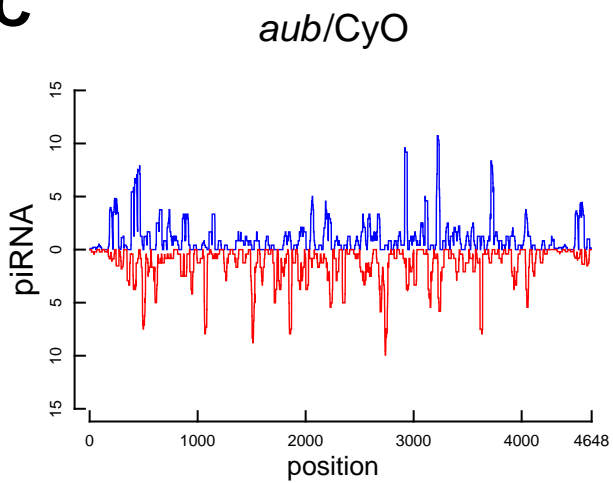
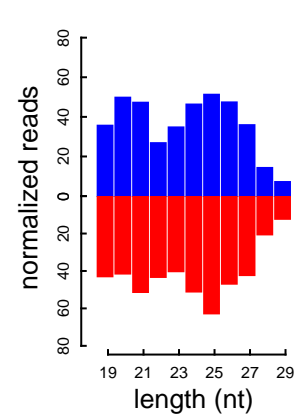
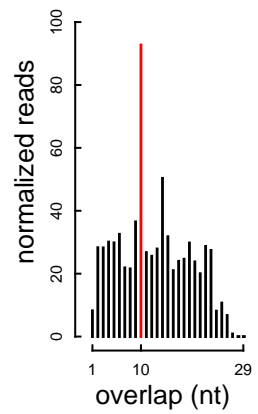
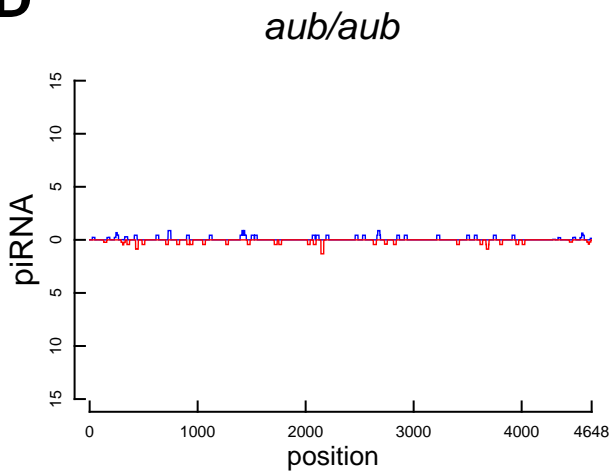
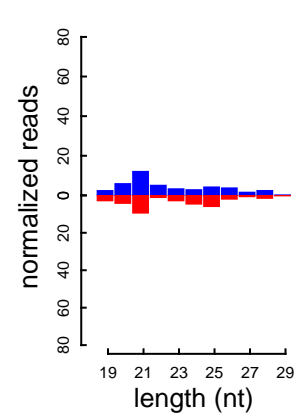
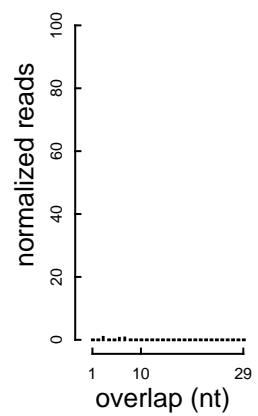
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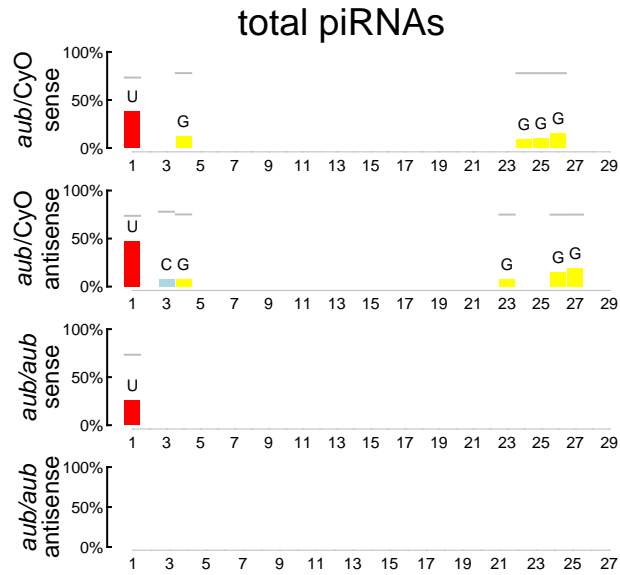
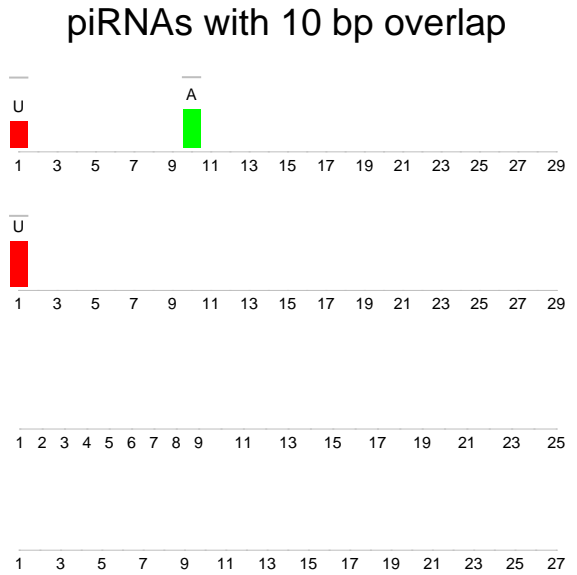
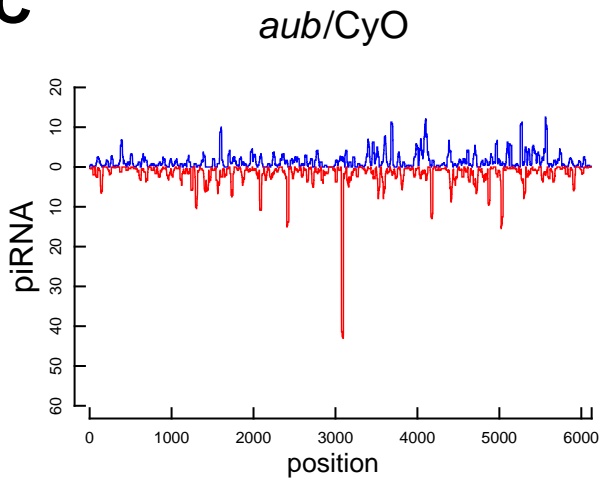
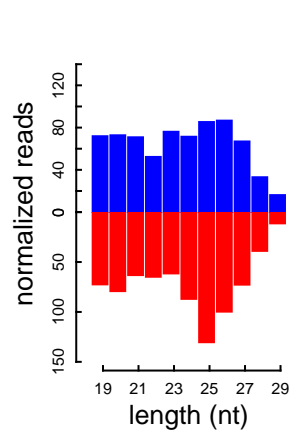
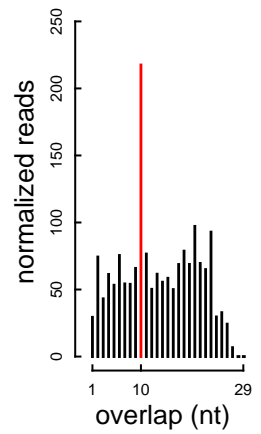
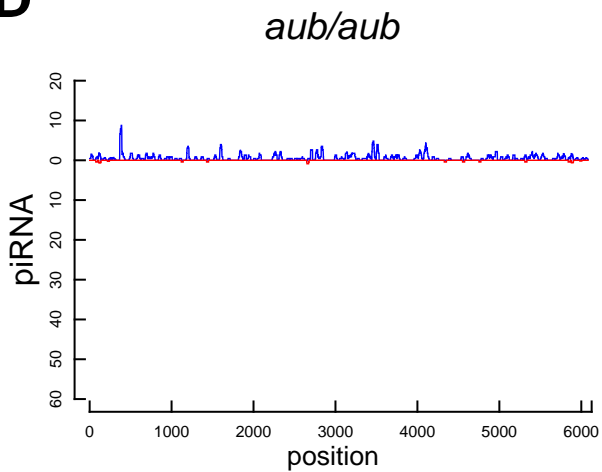
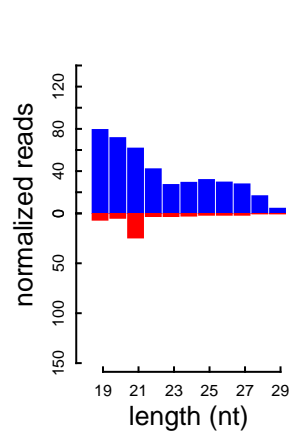
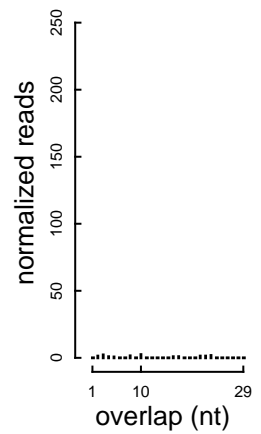
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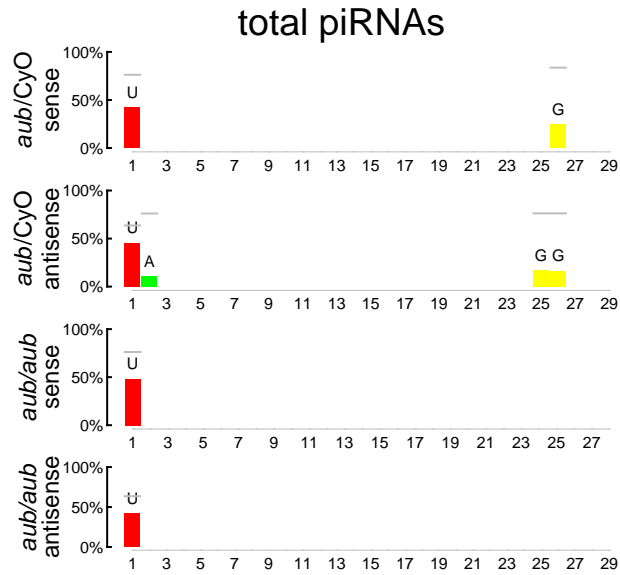
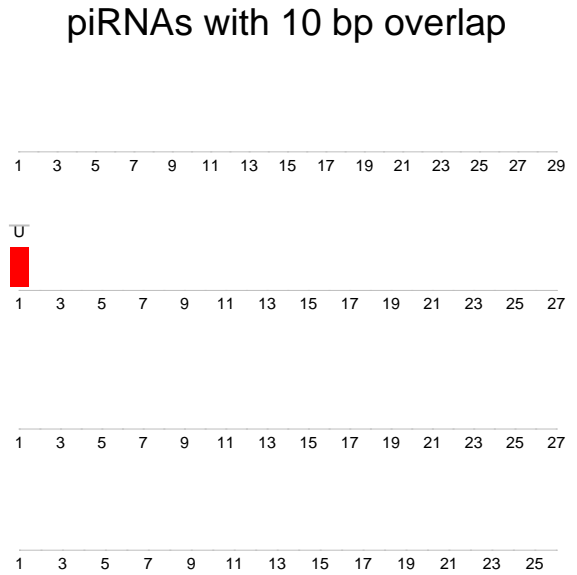
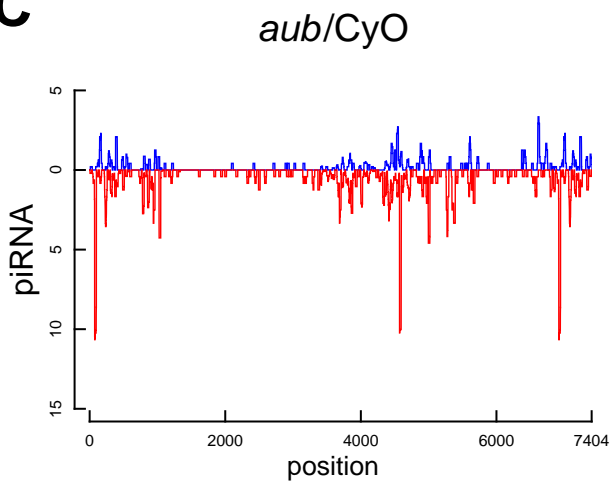
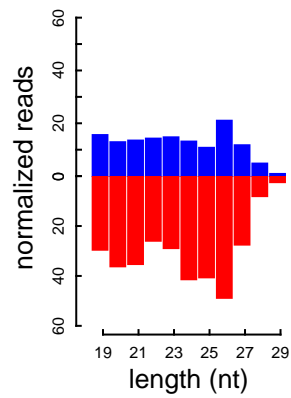
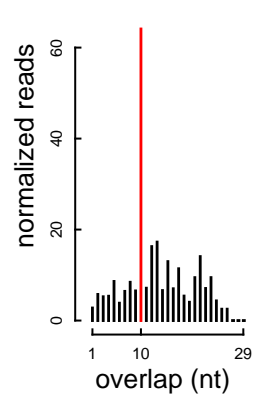
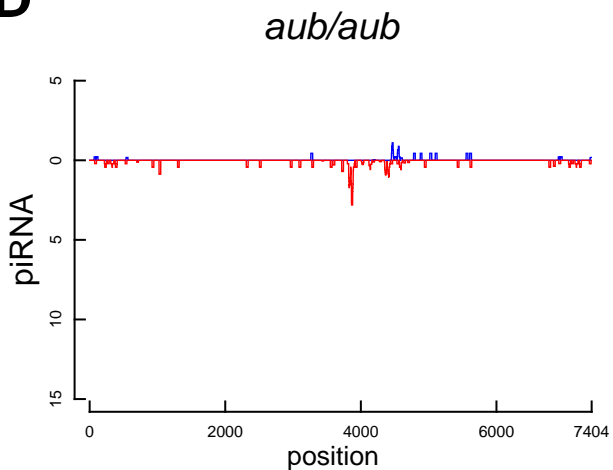
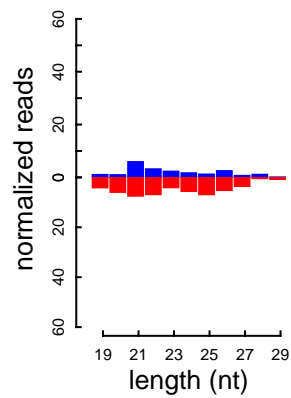
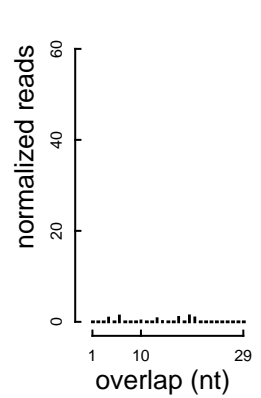
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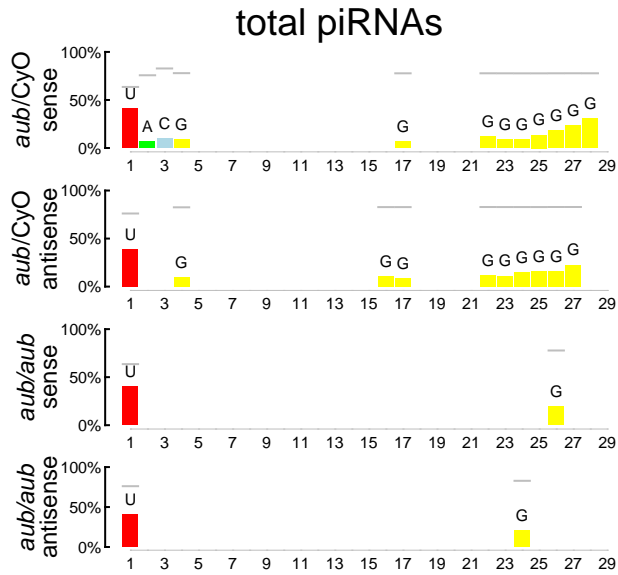
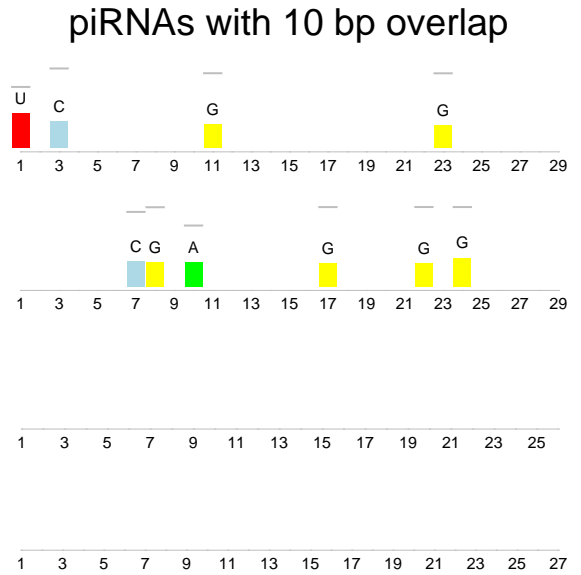
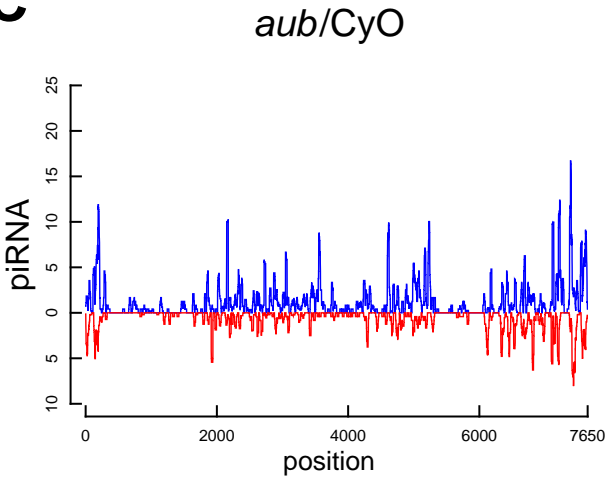
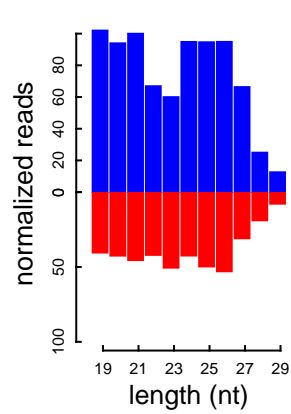
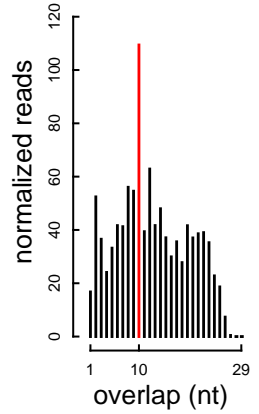
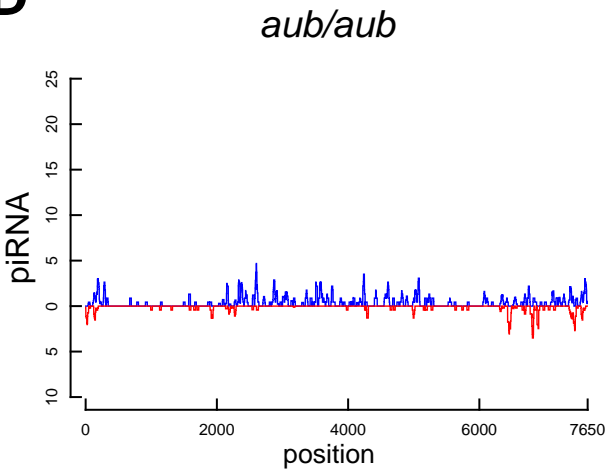
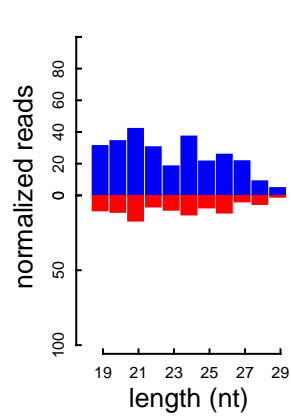
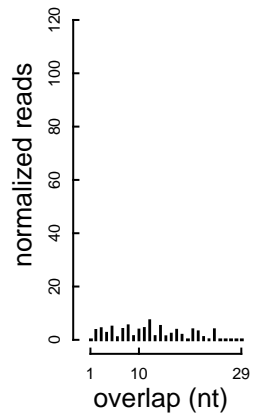
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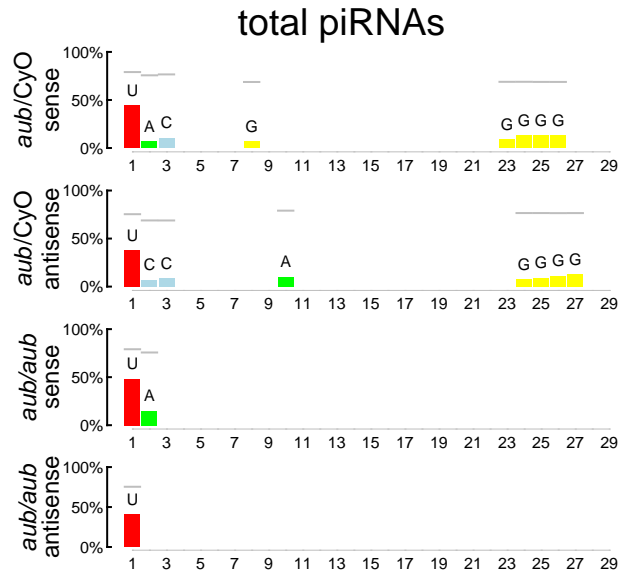
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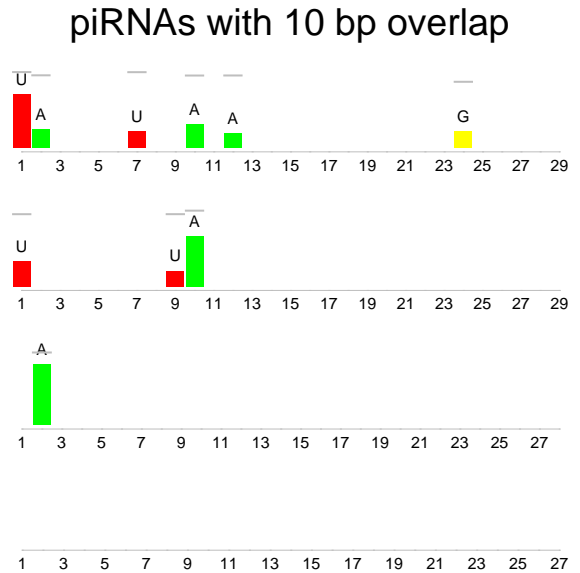
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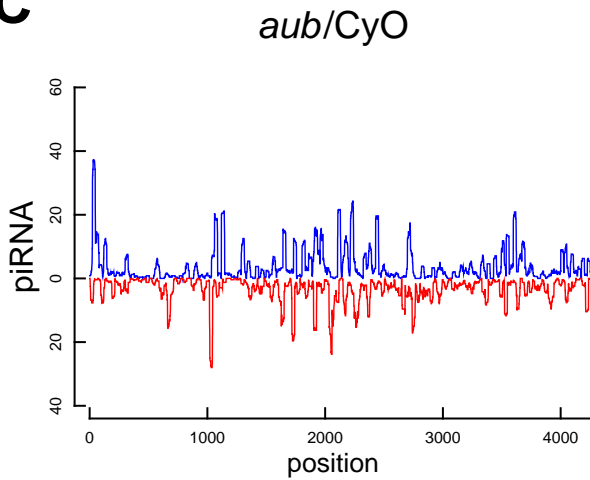
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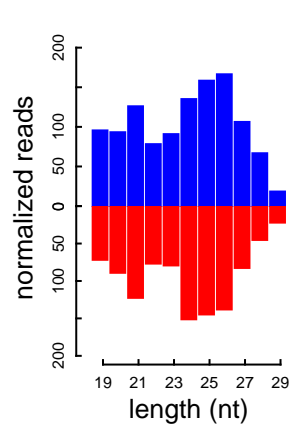
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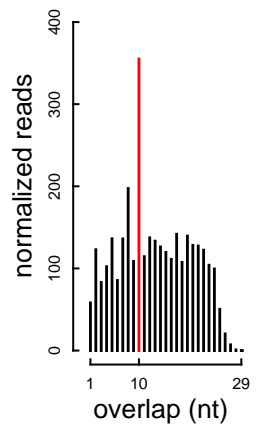
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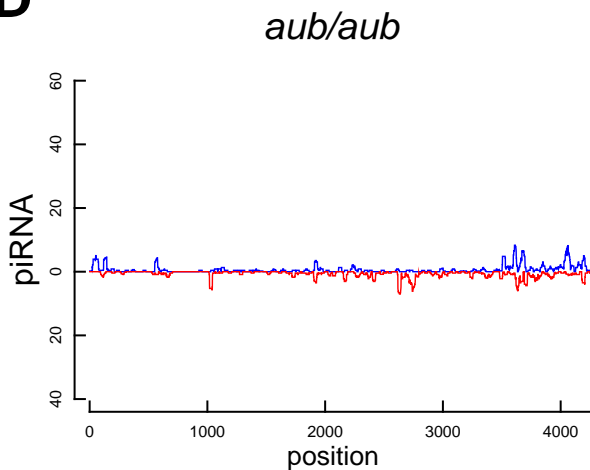
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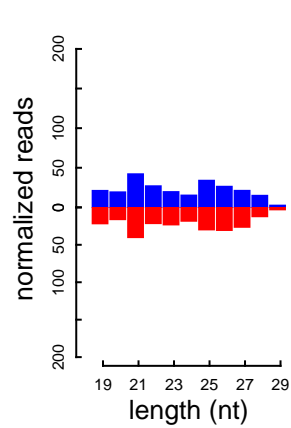
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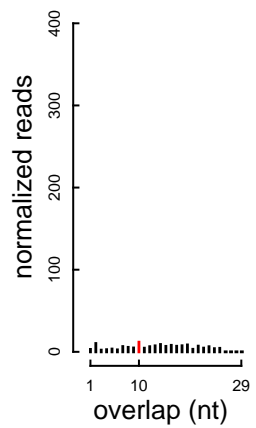
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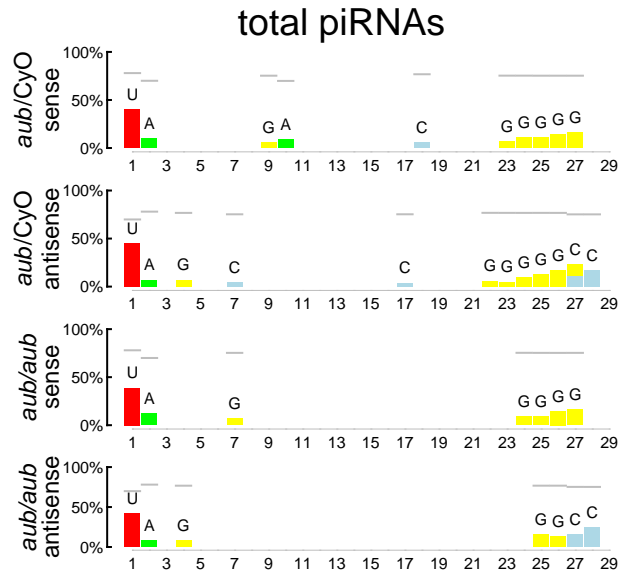
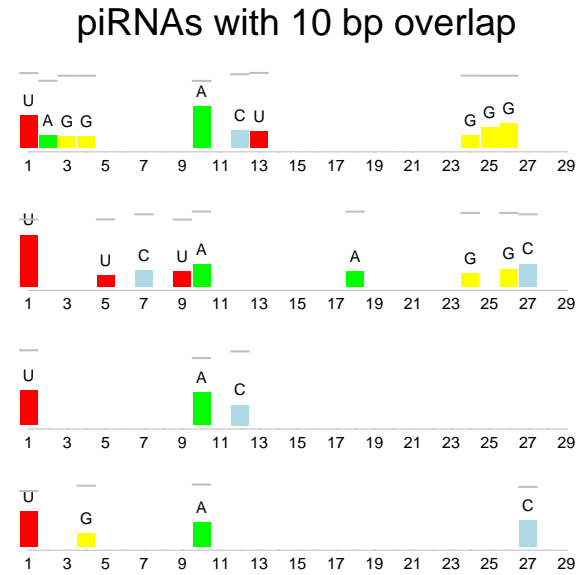
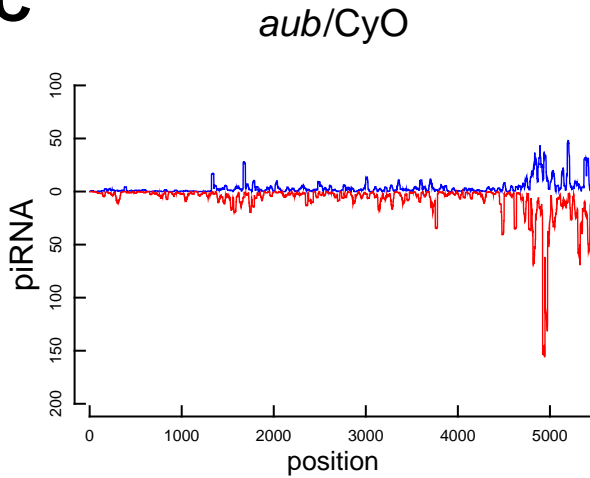
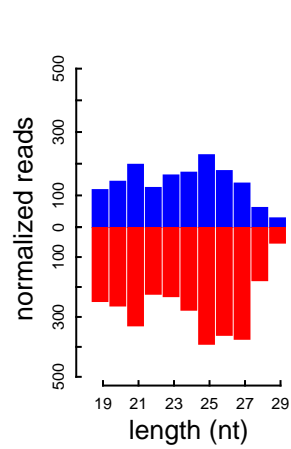
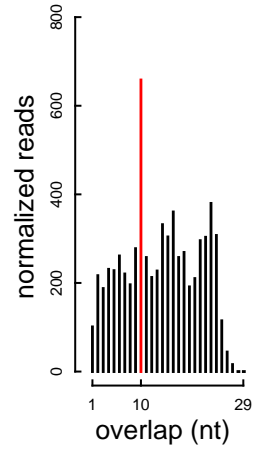
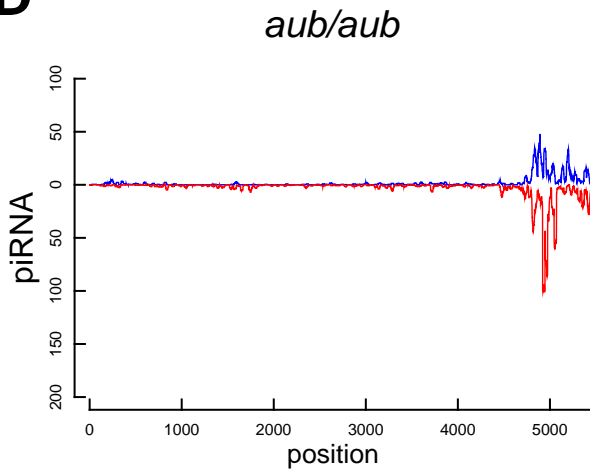
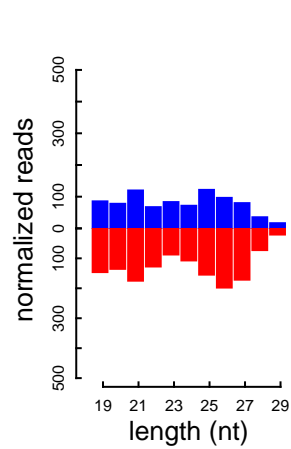
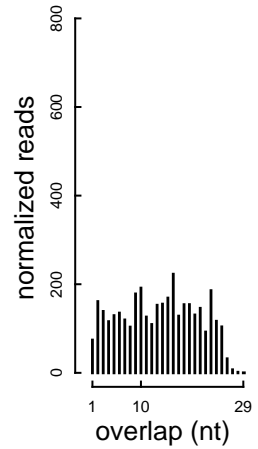
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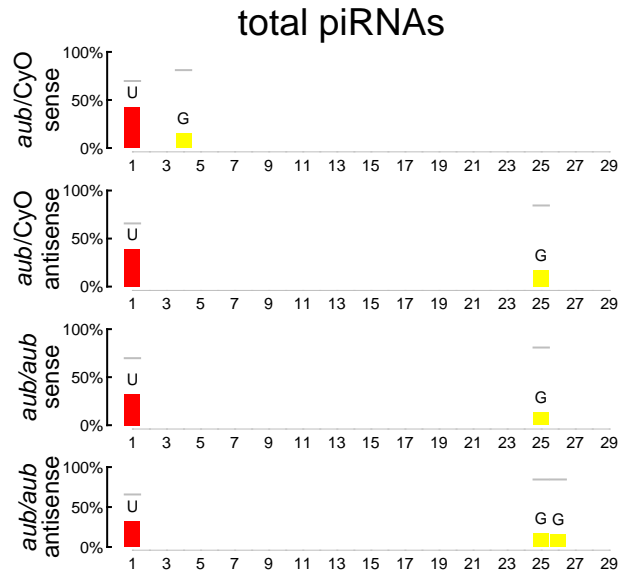
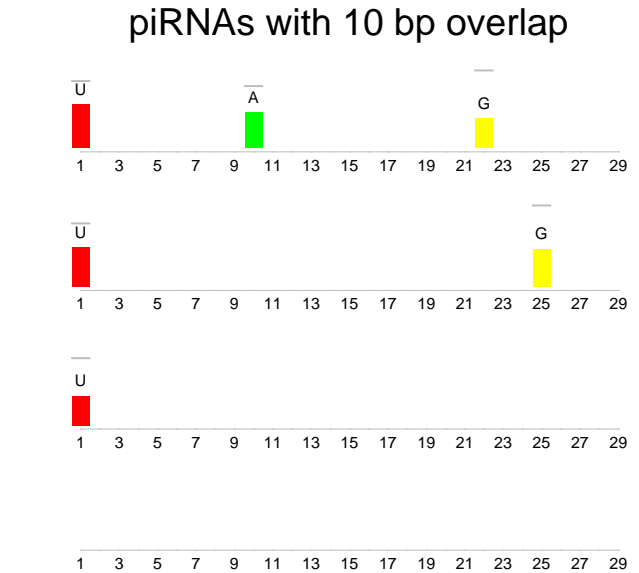
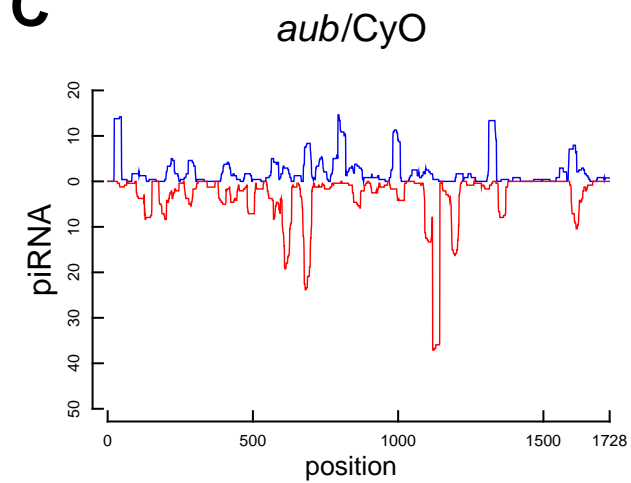
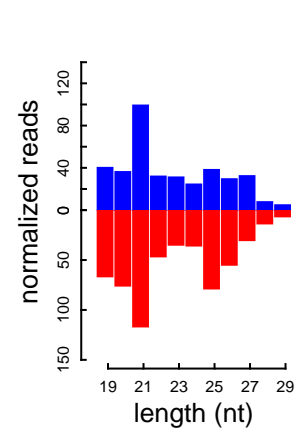
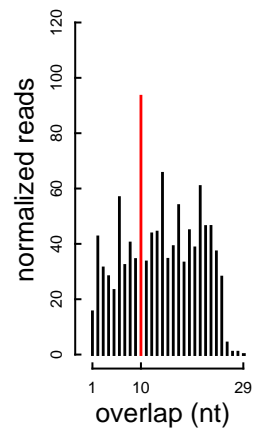
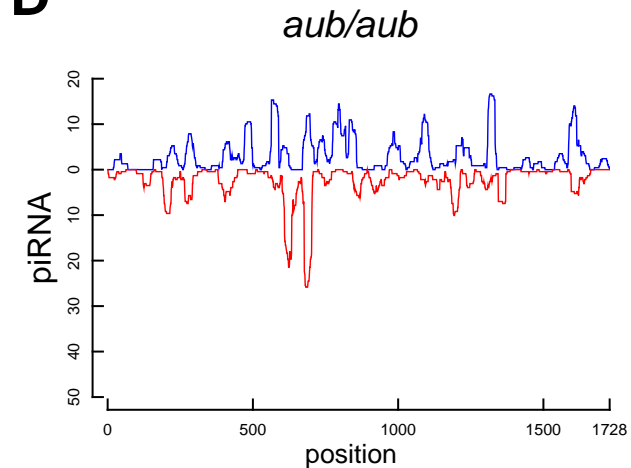
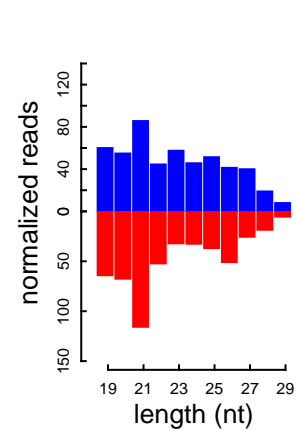
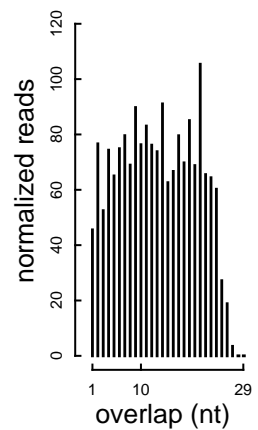
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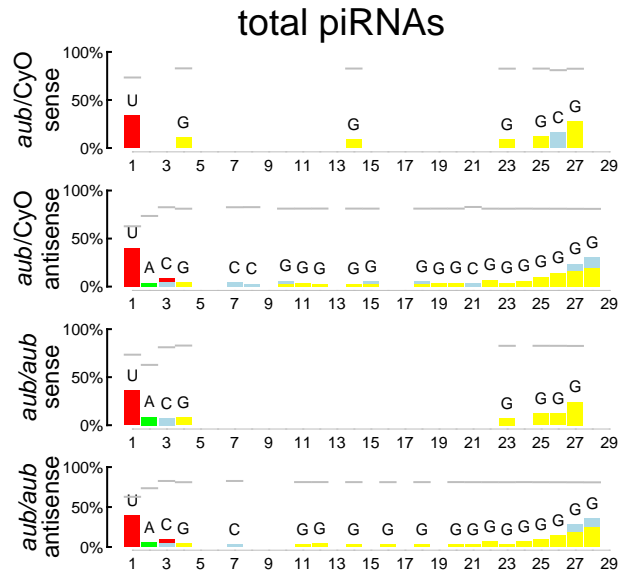
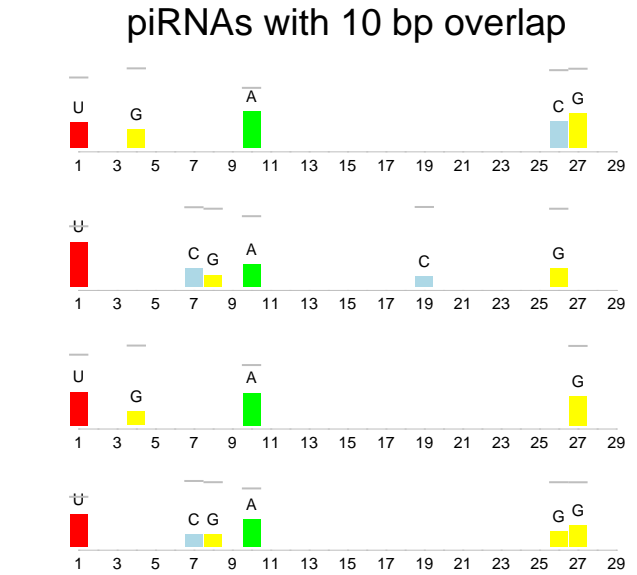
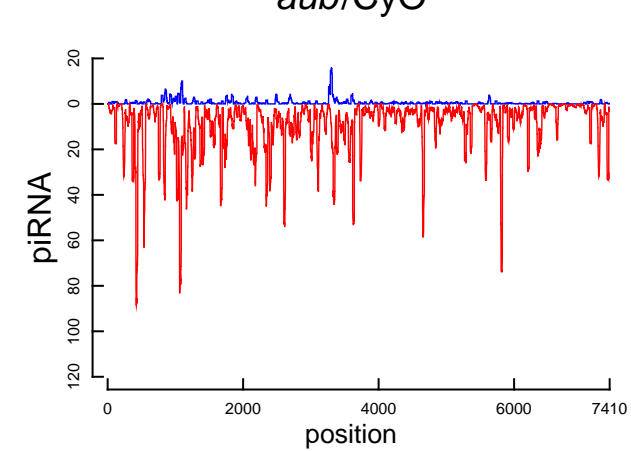
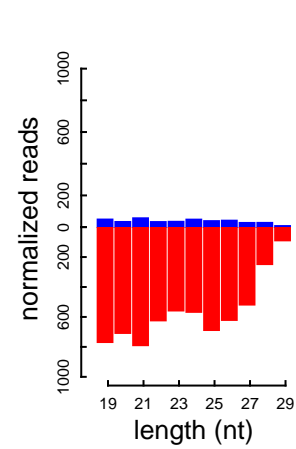
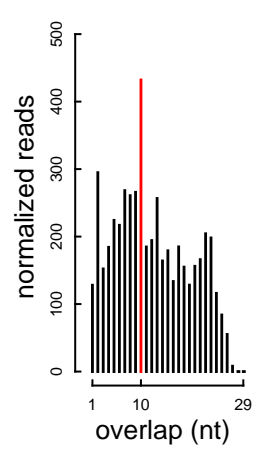
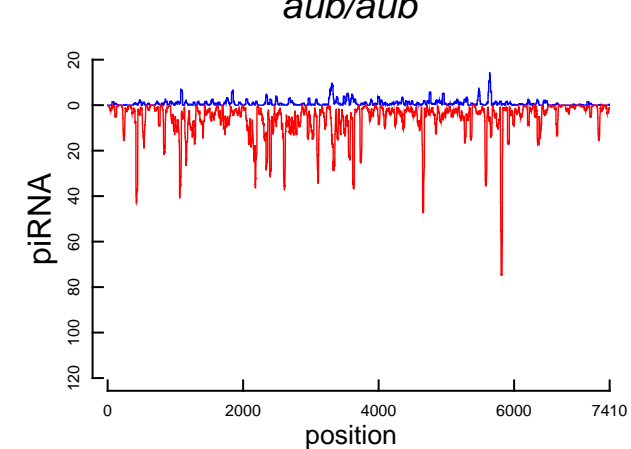
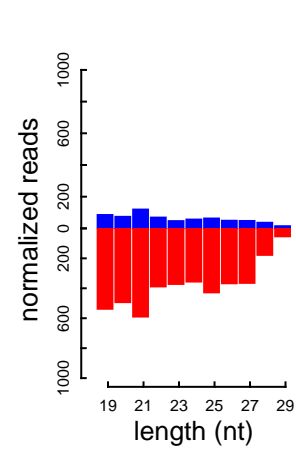
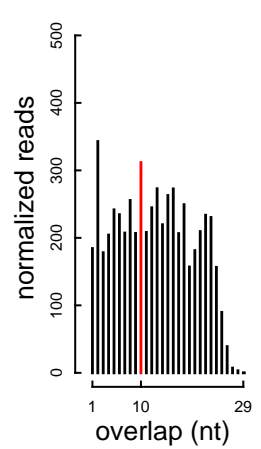
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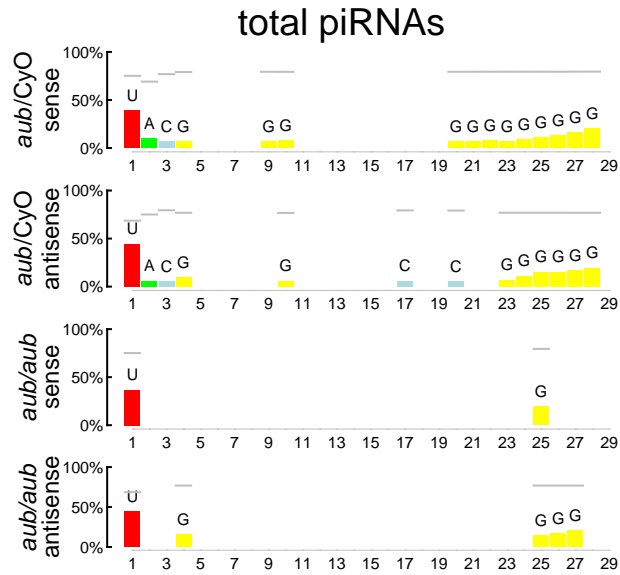
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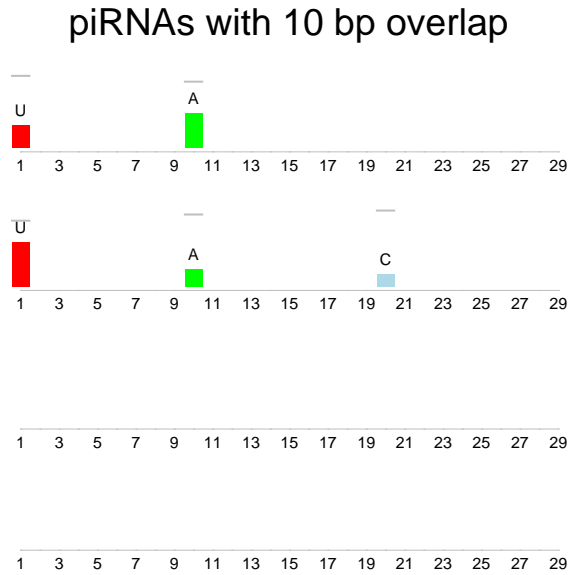
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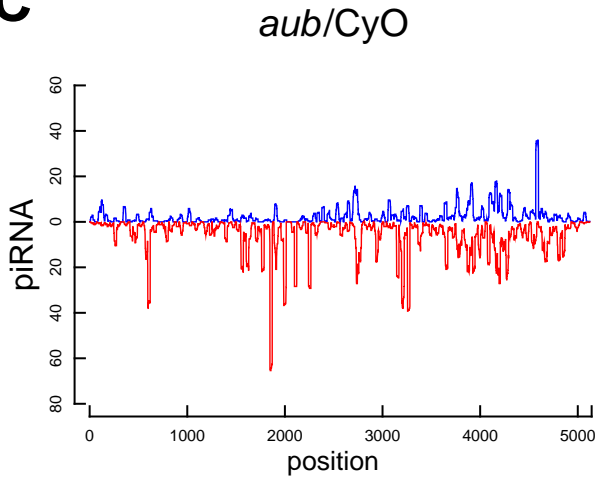
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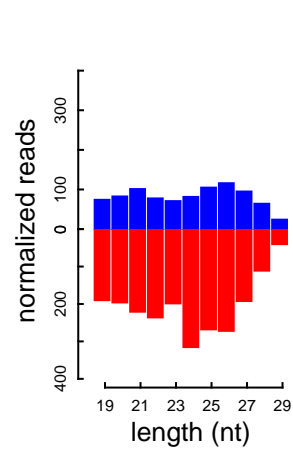
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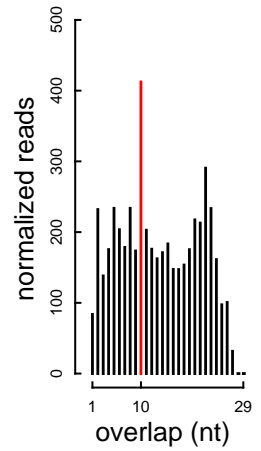
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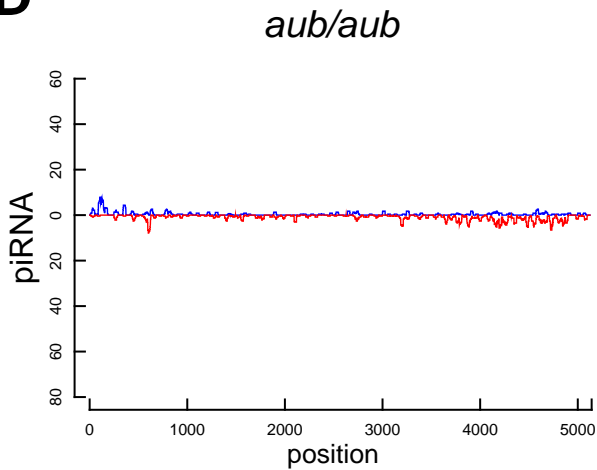
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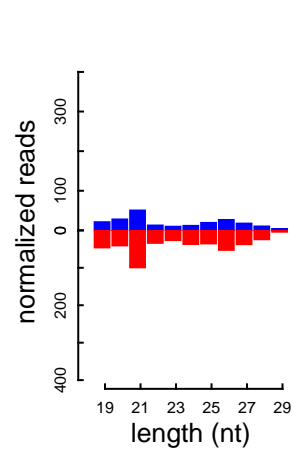
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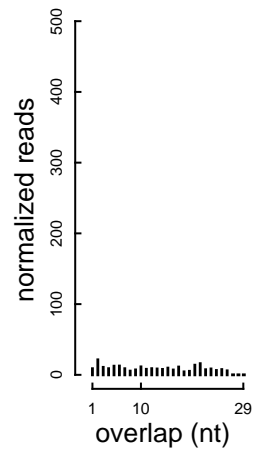
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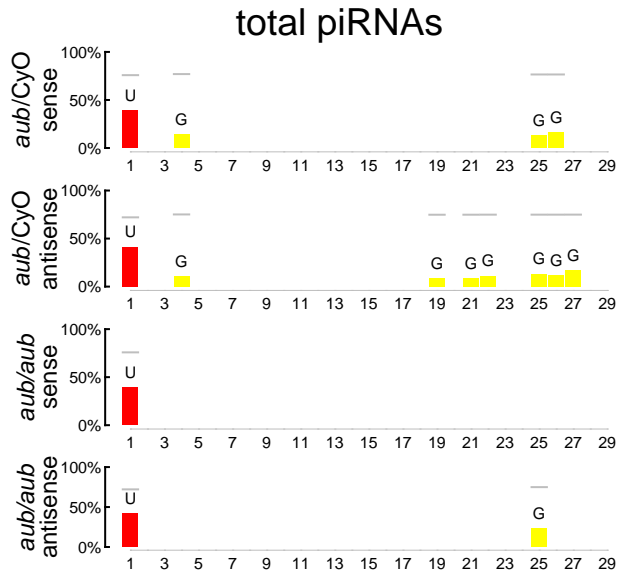


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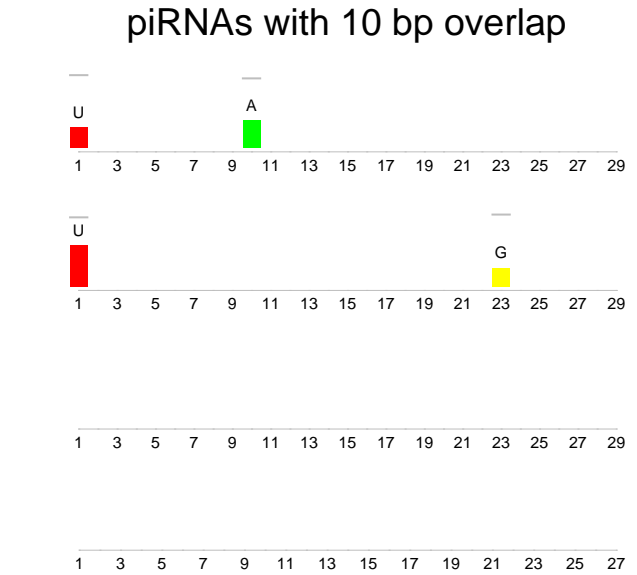


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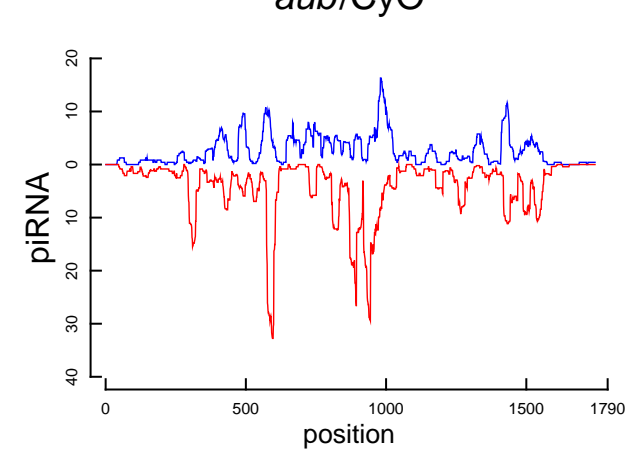
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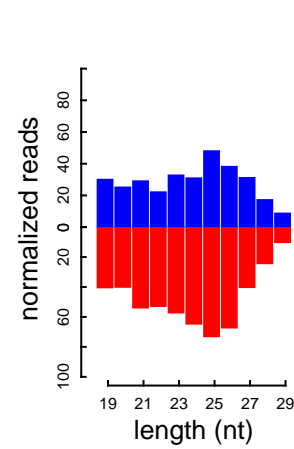
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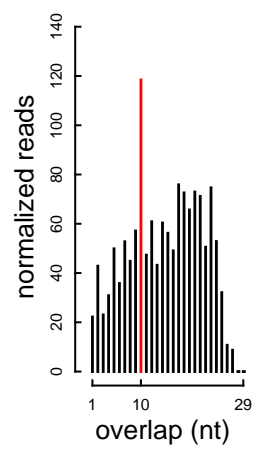
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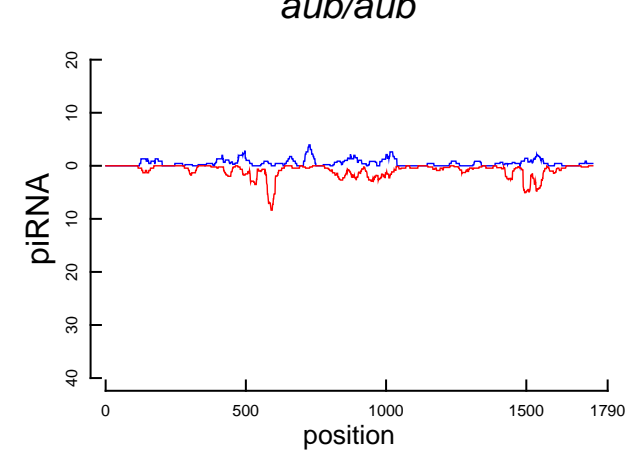
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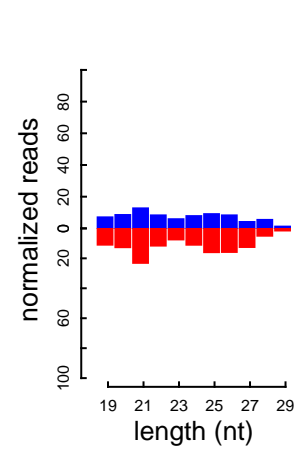
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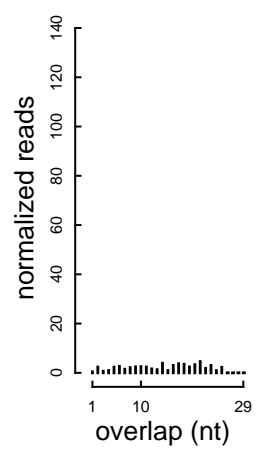
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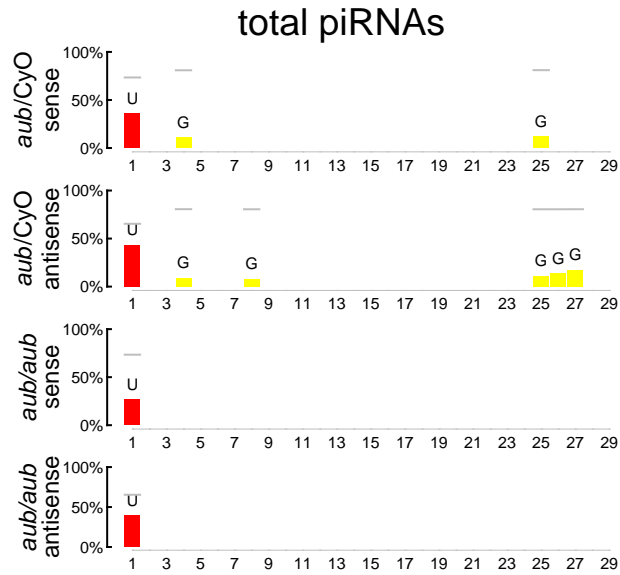


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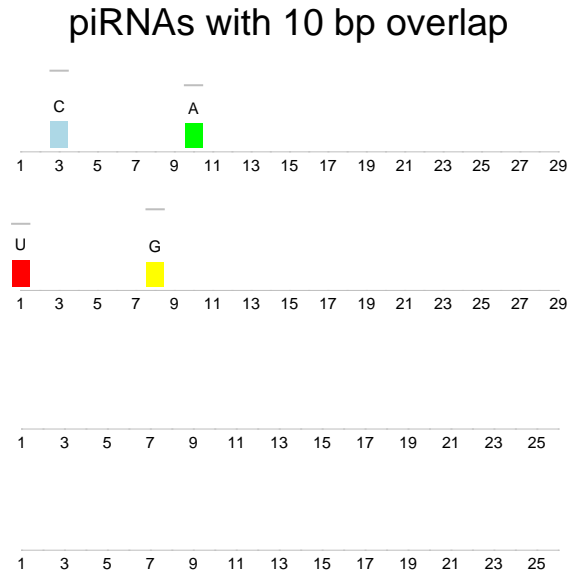


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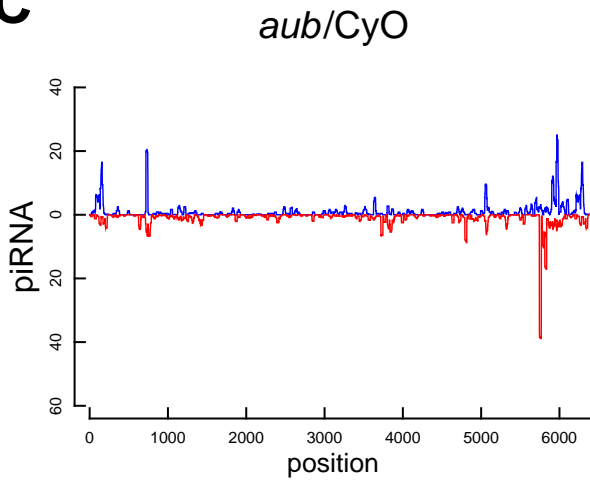
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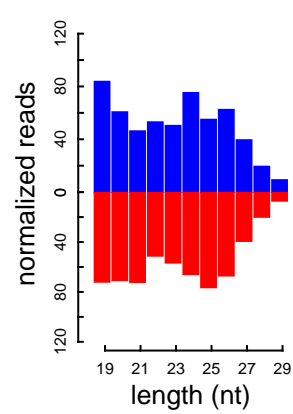
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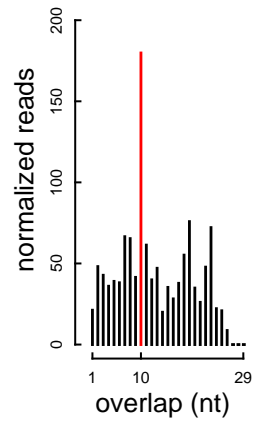
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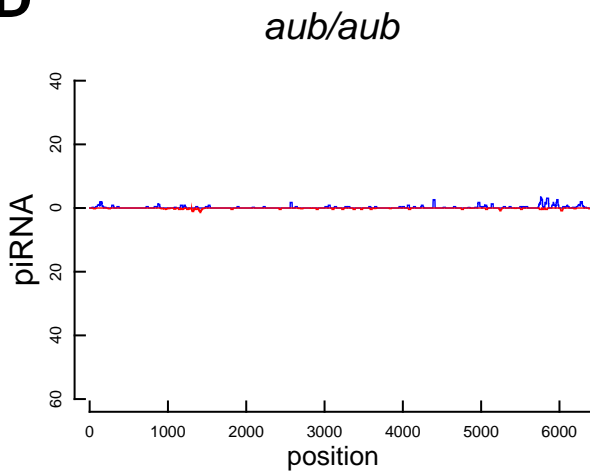
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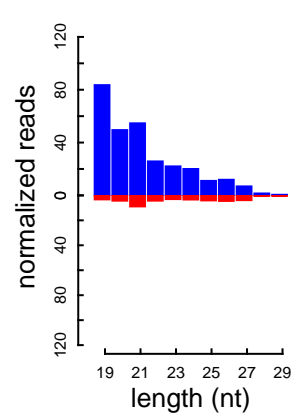
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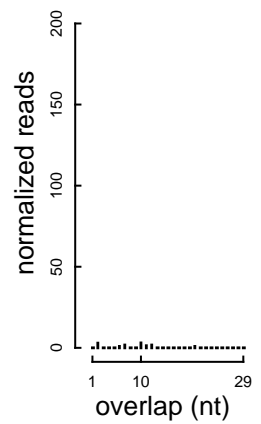
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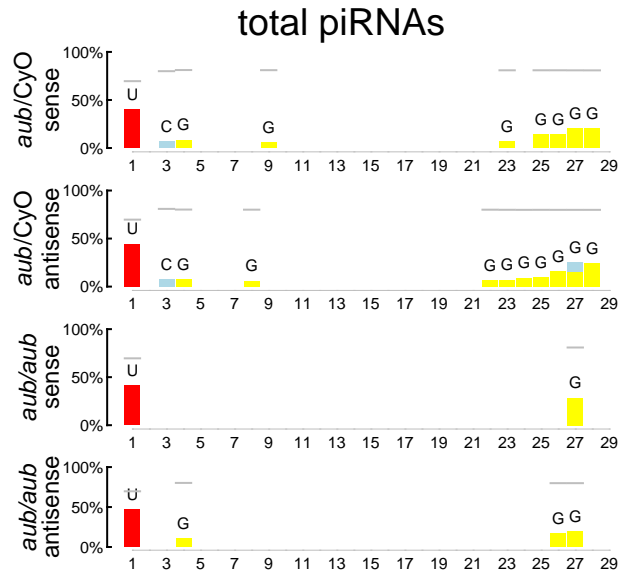
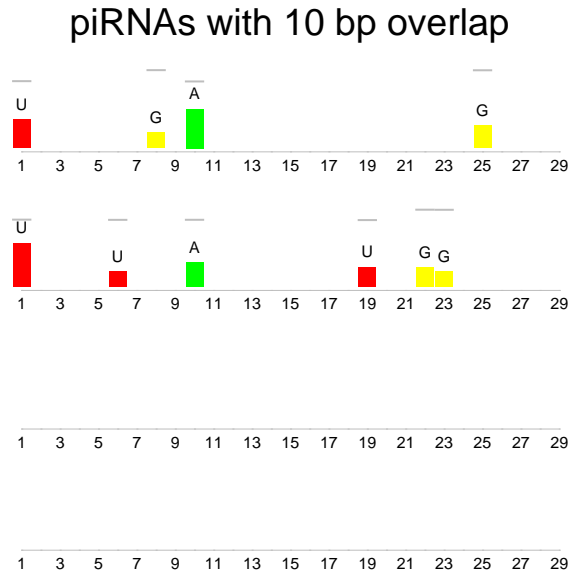
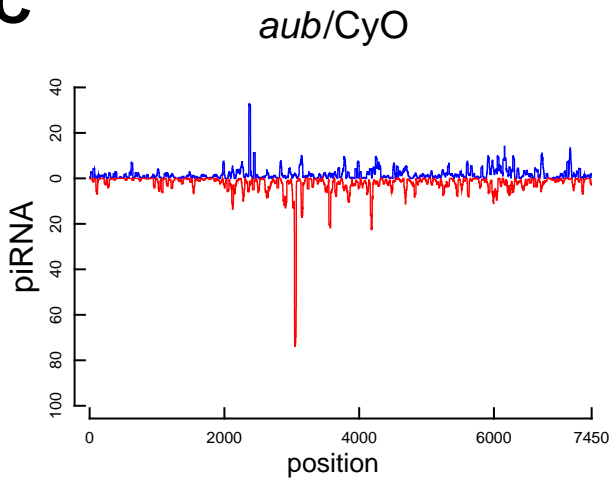
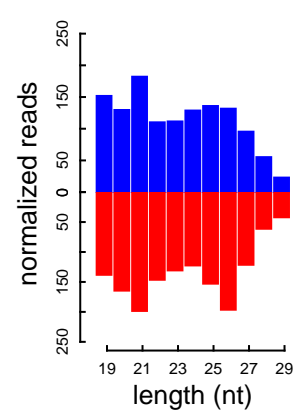
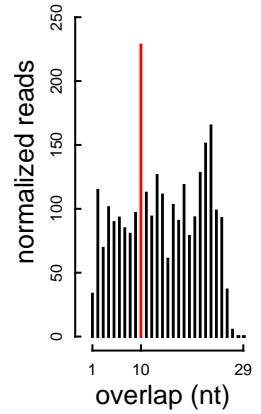
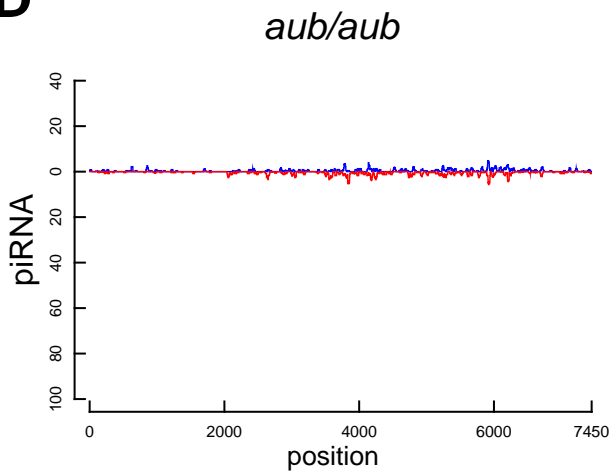
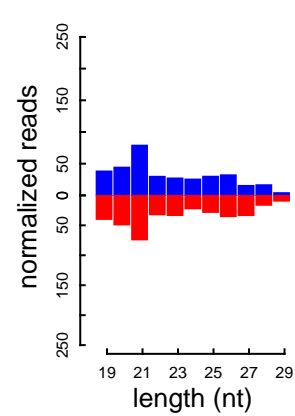
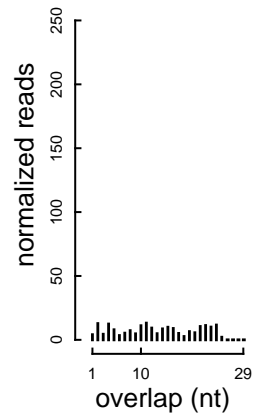
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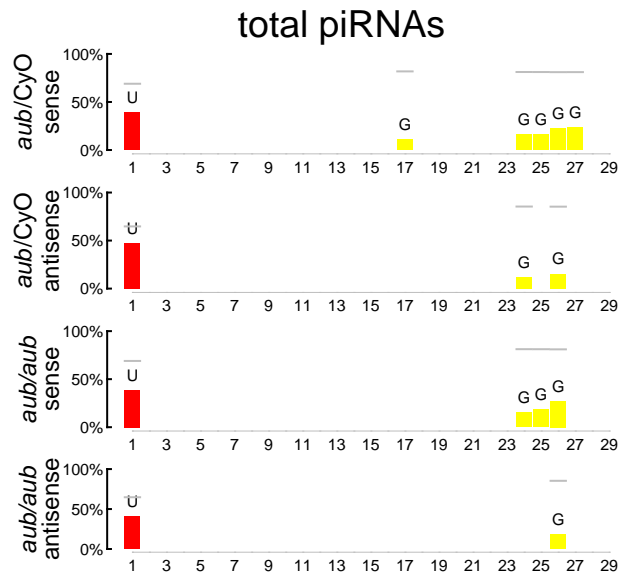
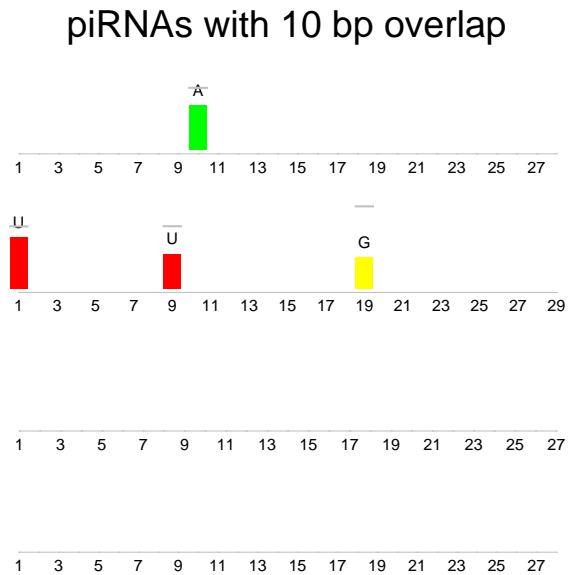
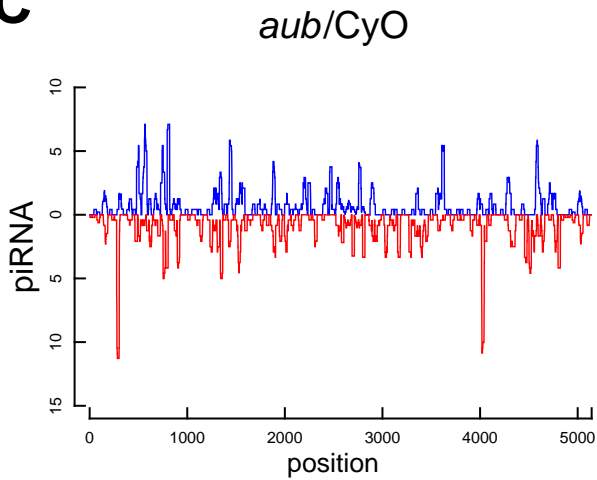
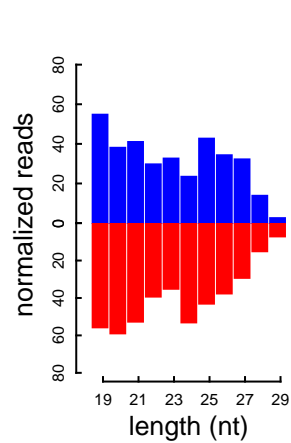
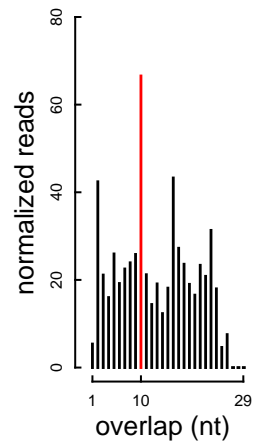
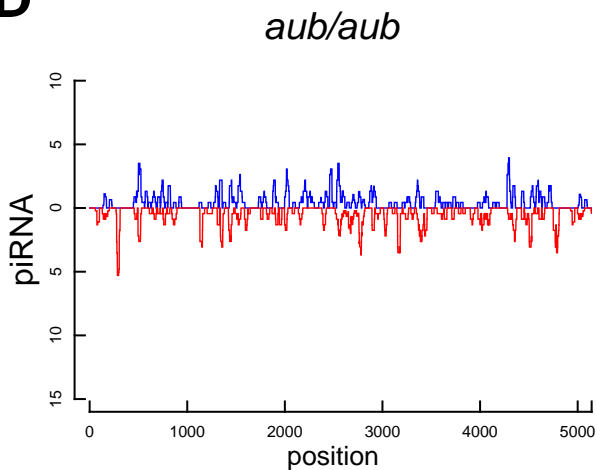
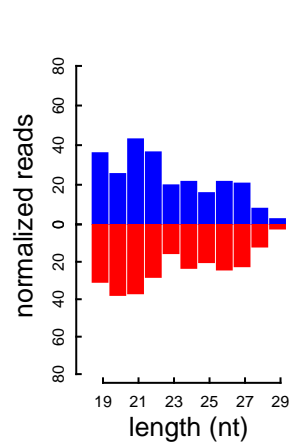
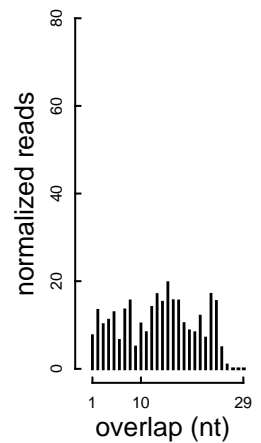
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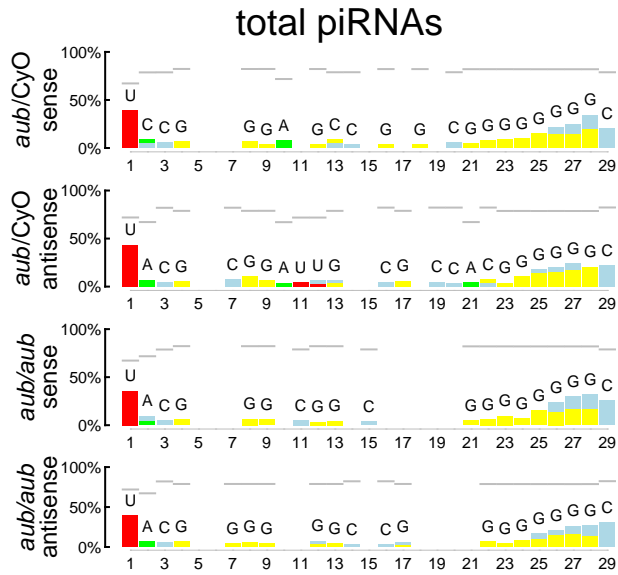
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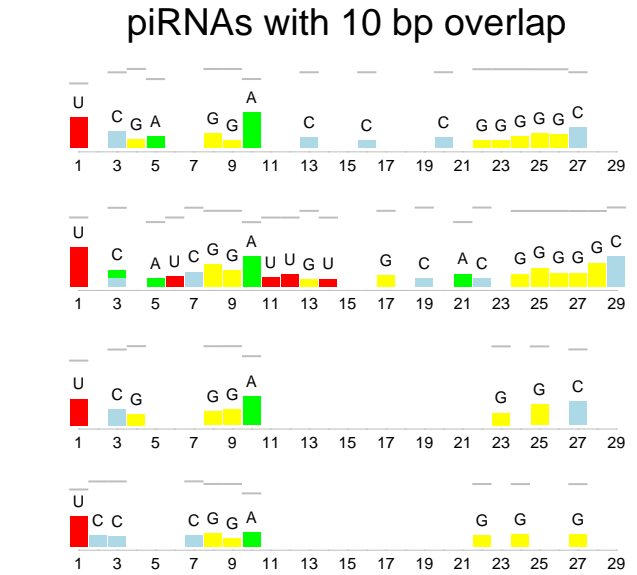
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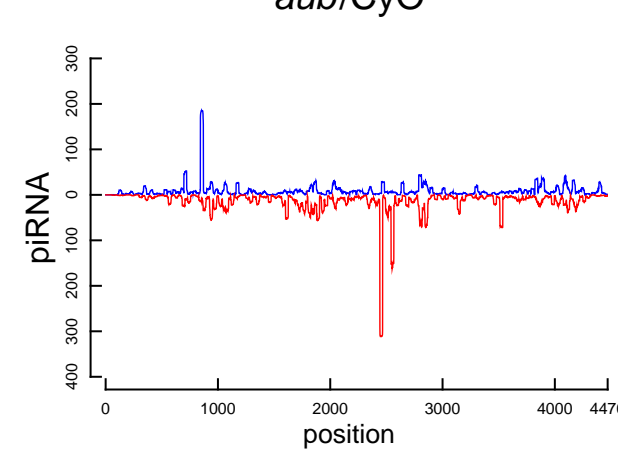
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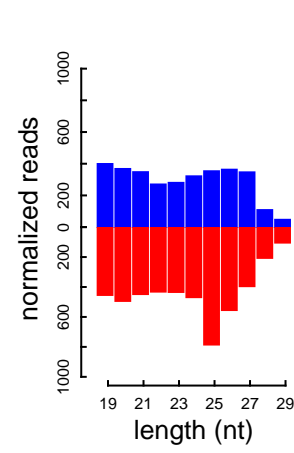
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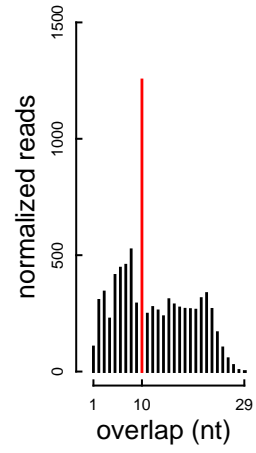
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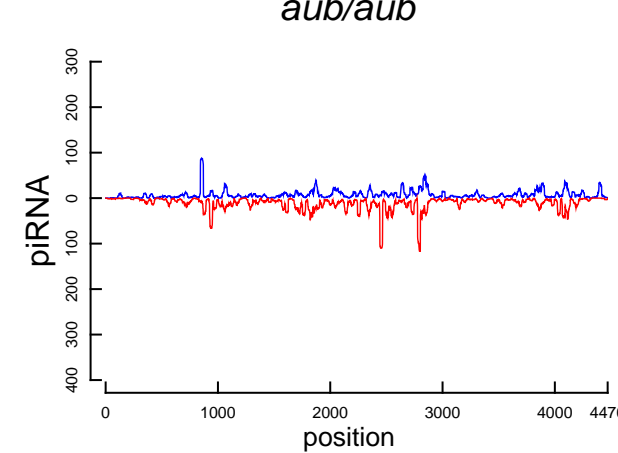
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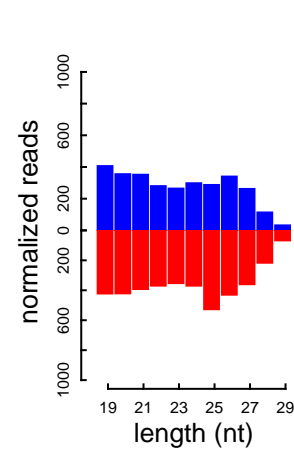
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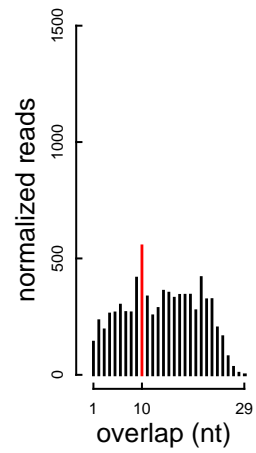
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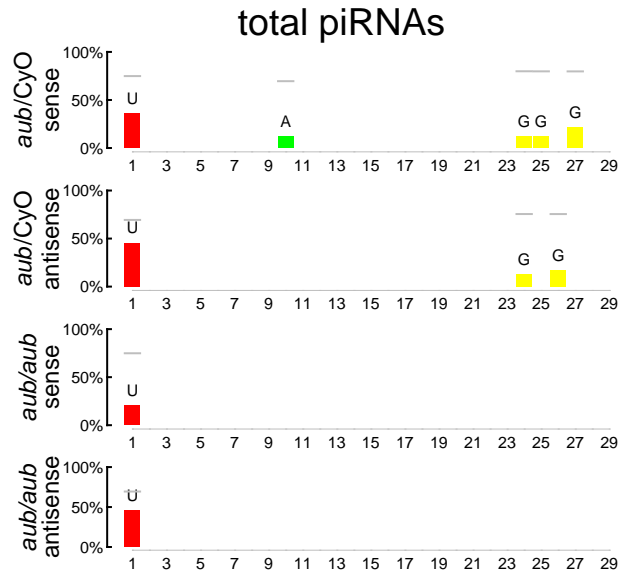
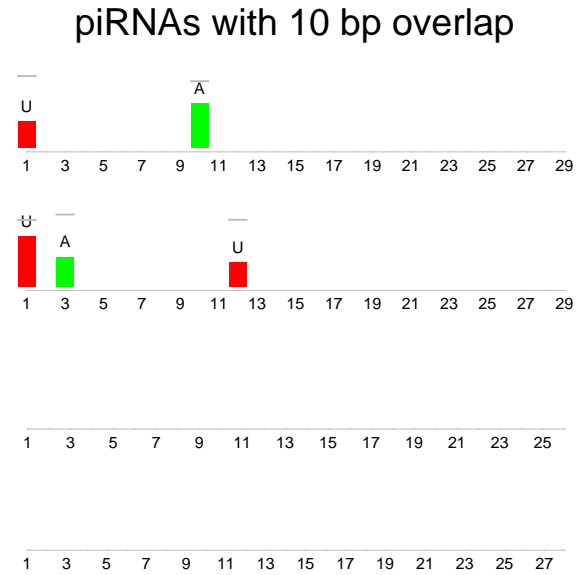
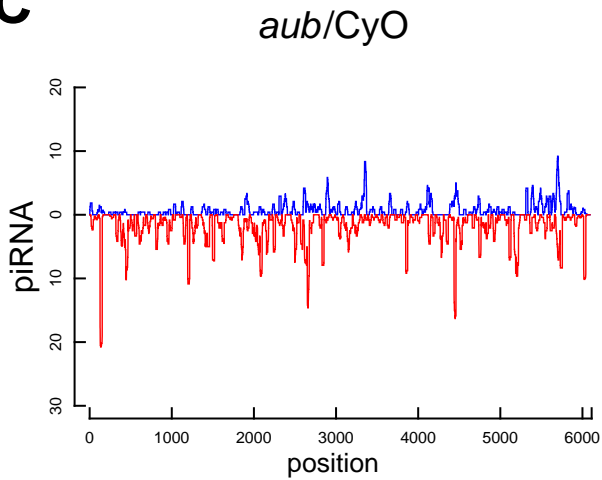
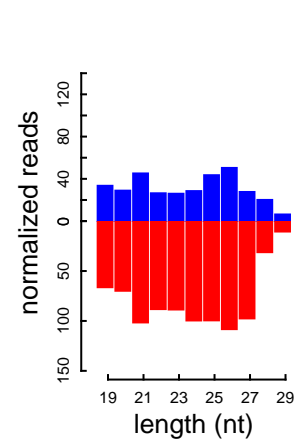
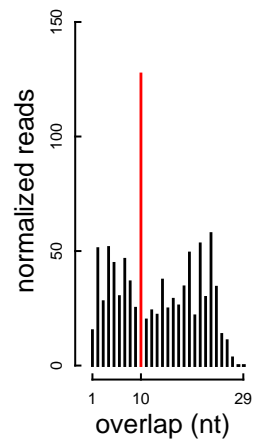
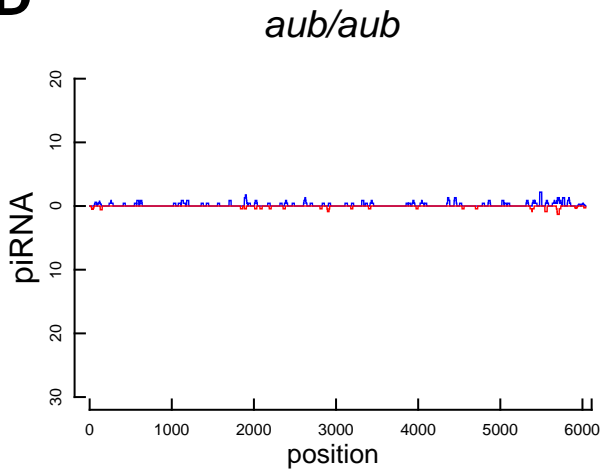
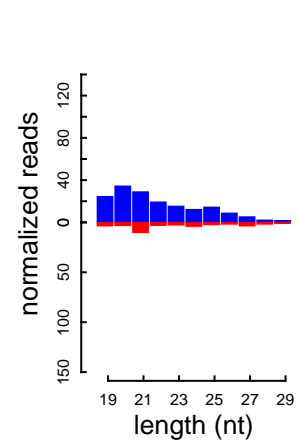
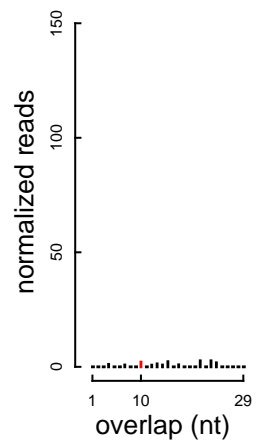
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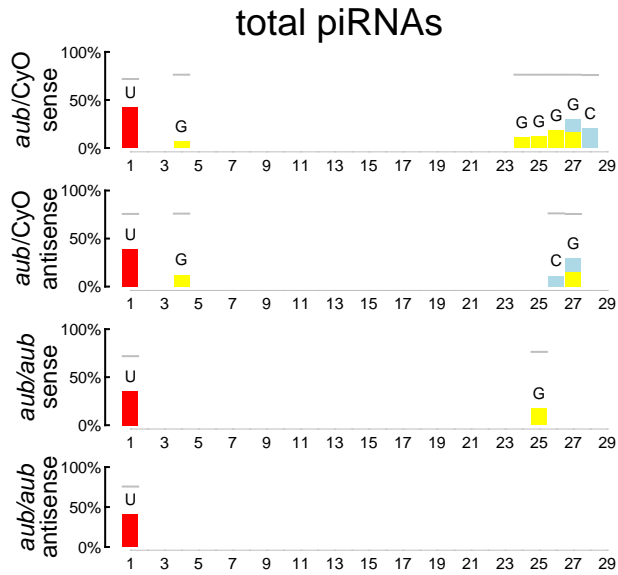


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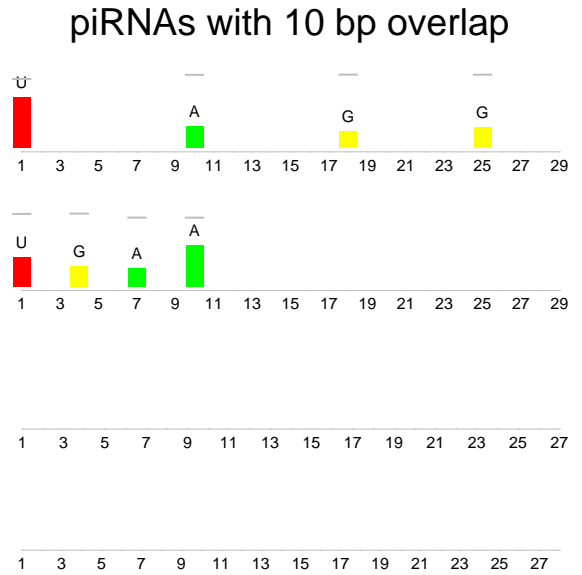
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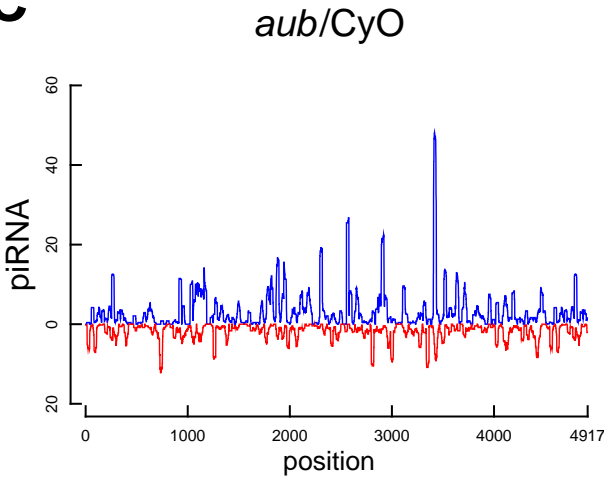
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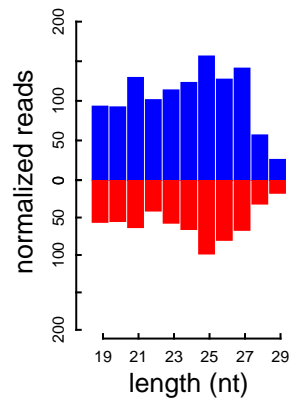
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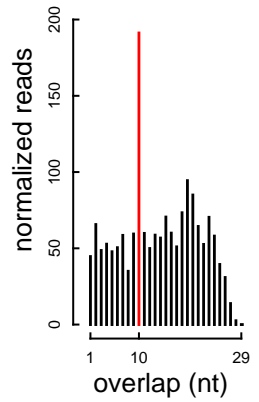
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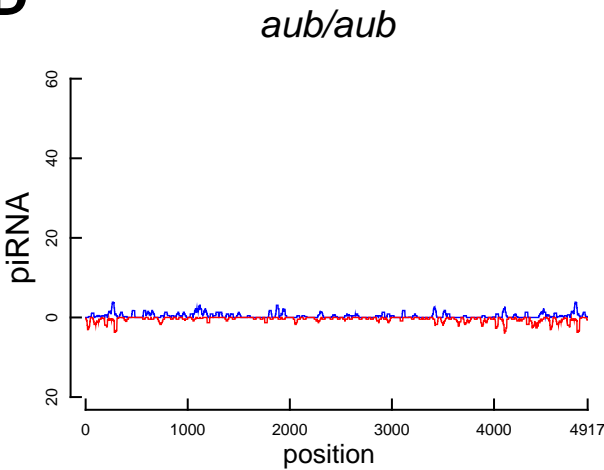
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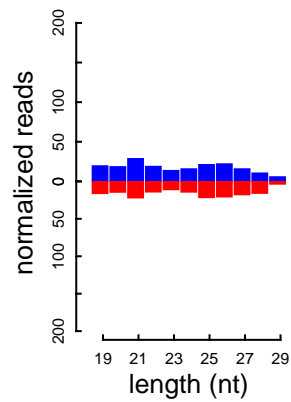
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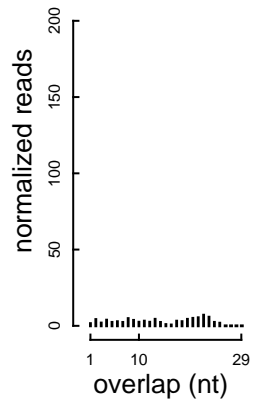
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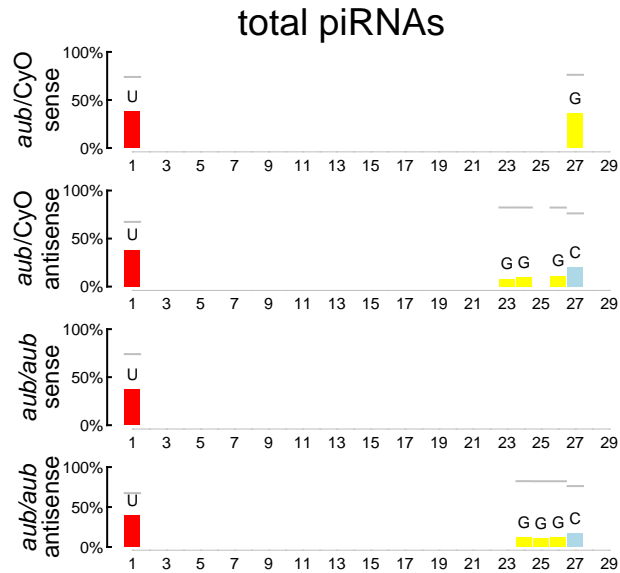
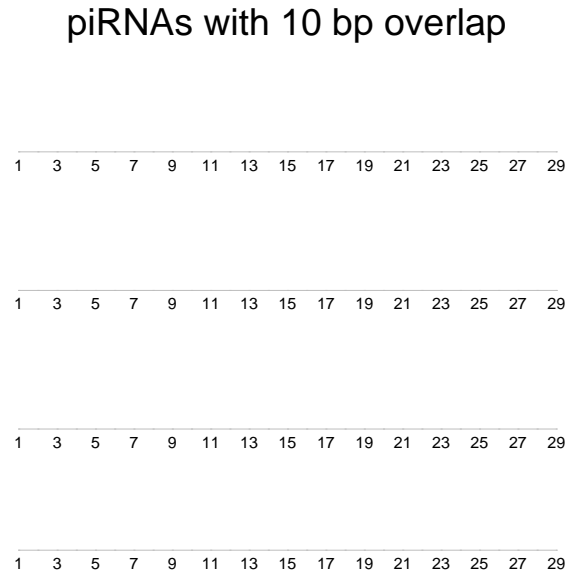
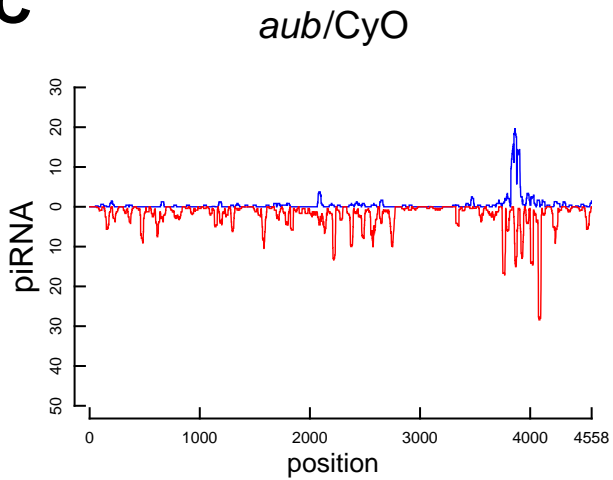
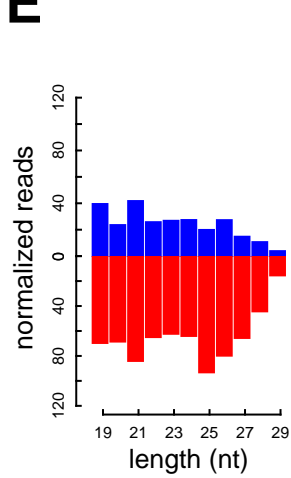
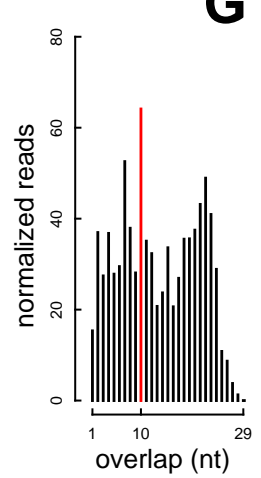
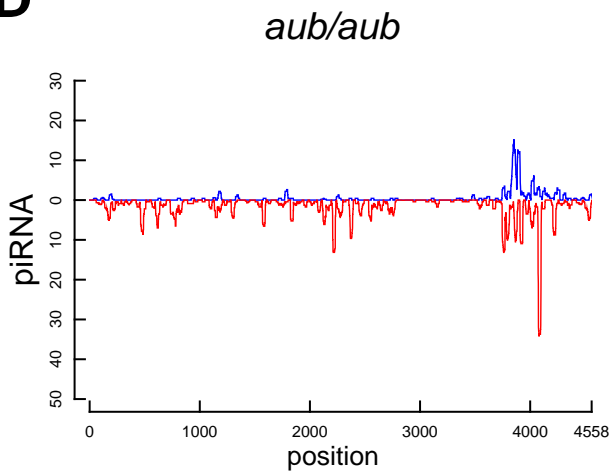
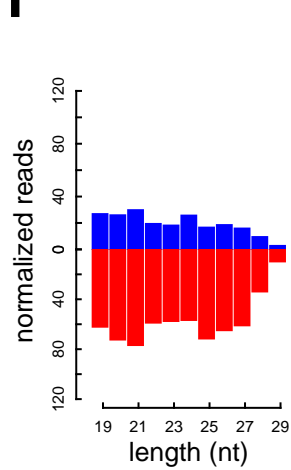
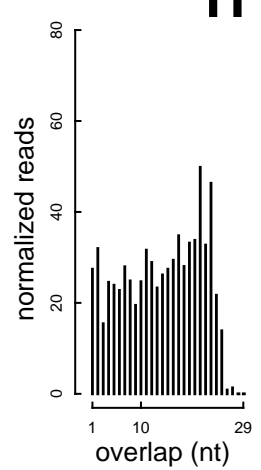
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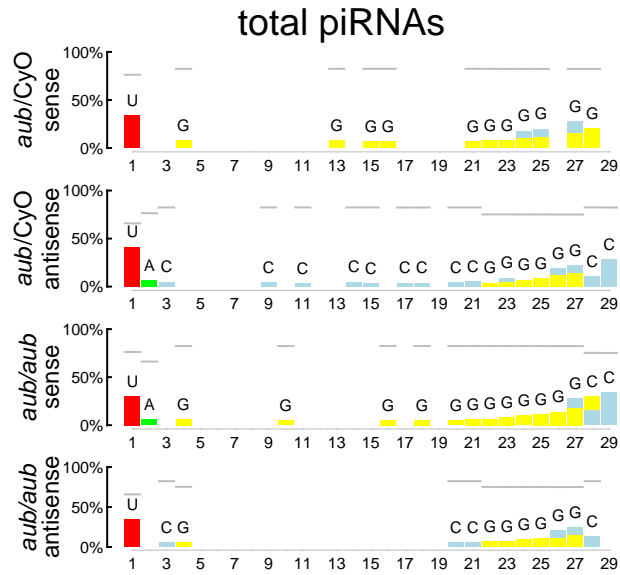
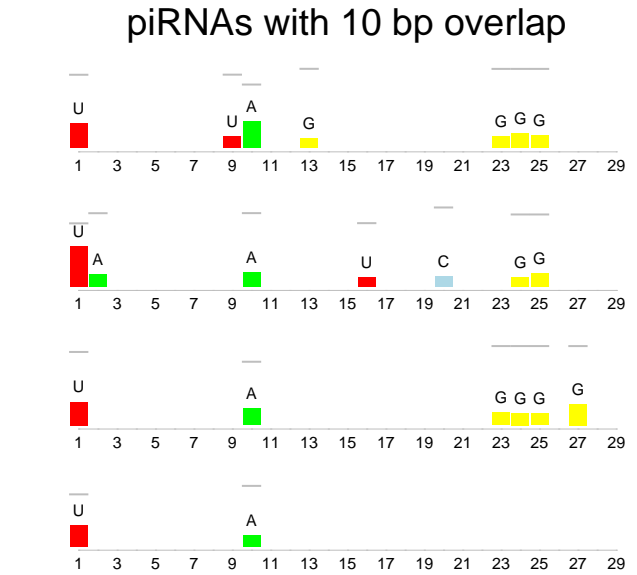
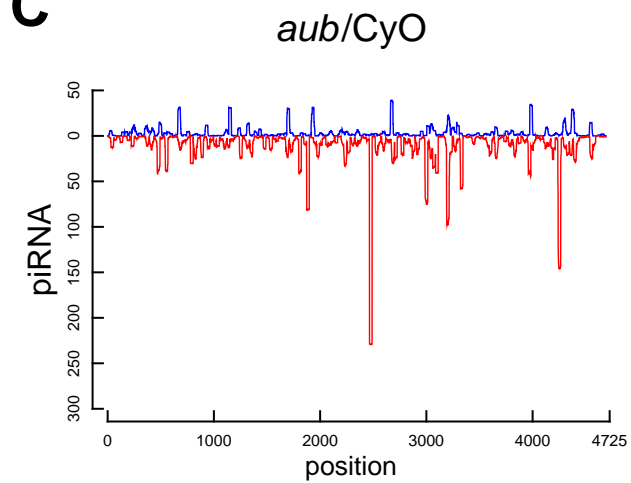
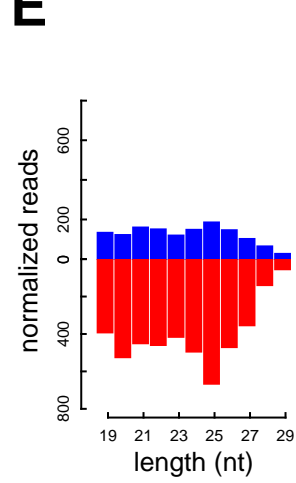
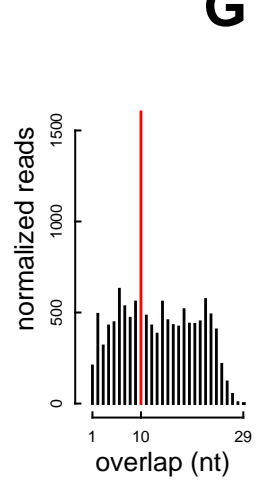
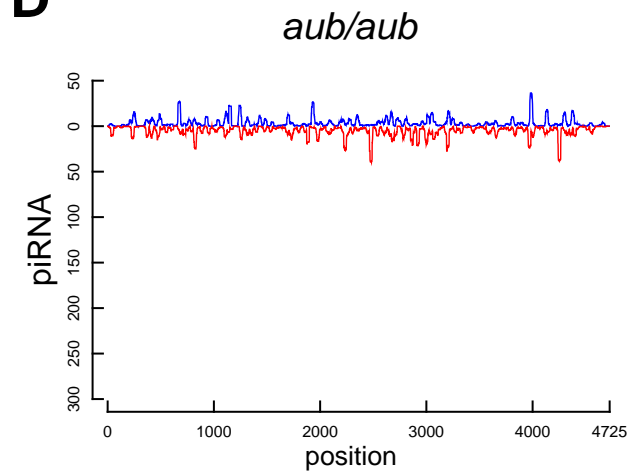
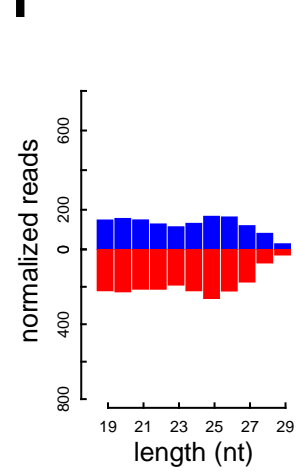
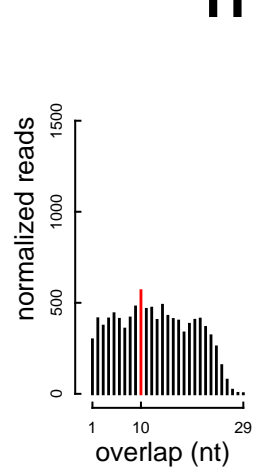
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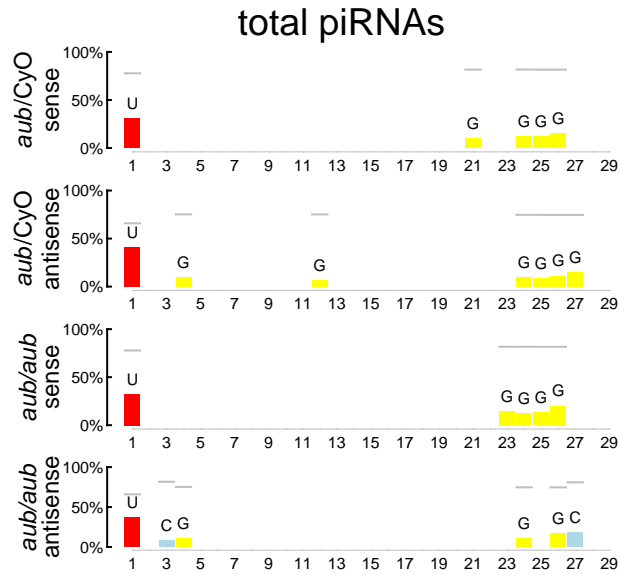
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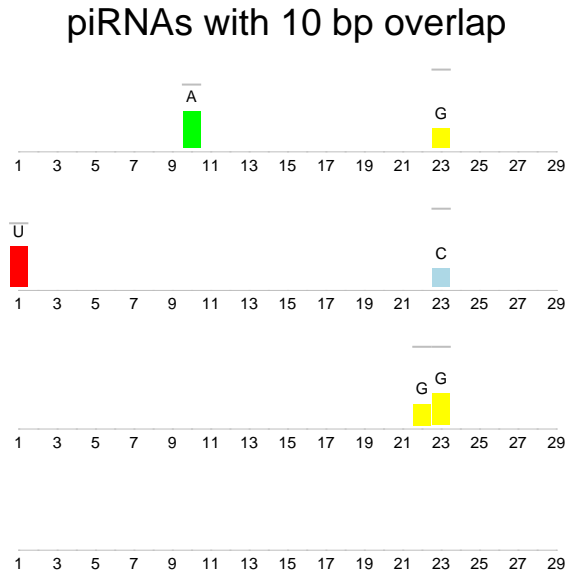
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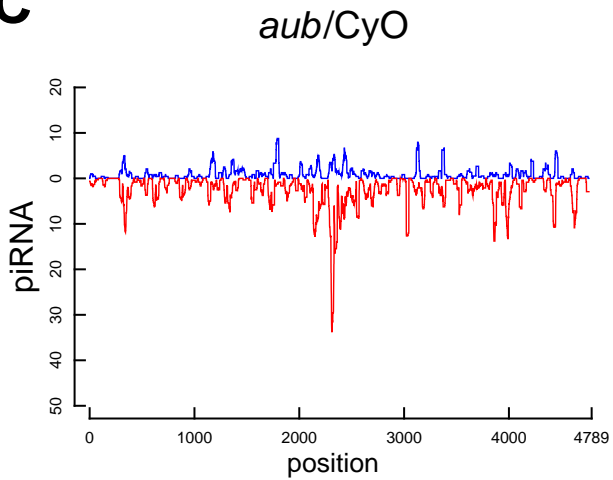
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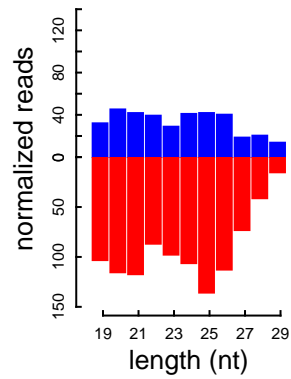
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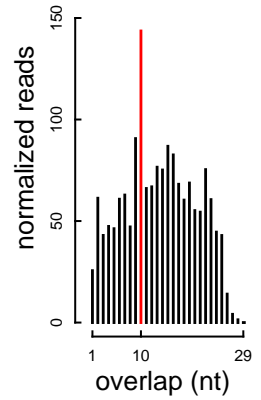
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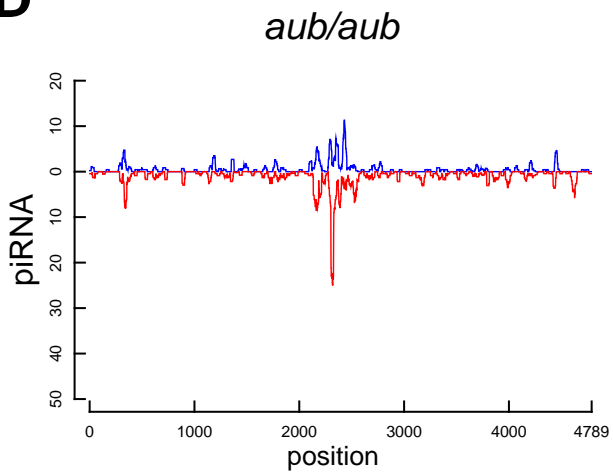
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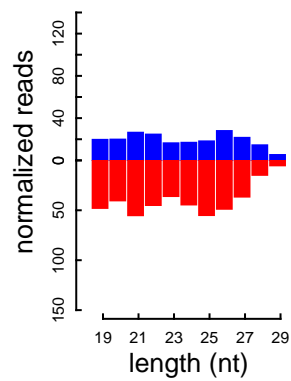
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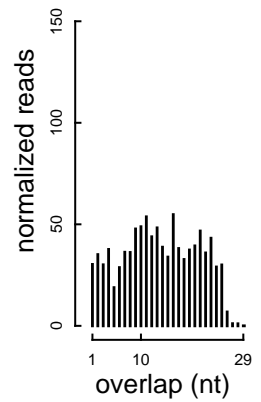
D



F

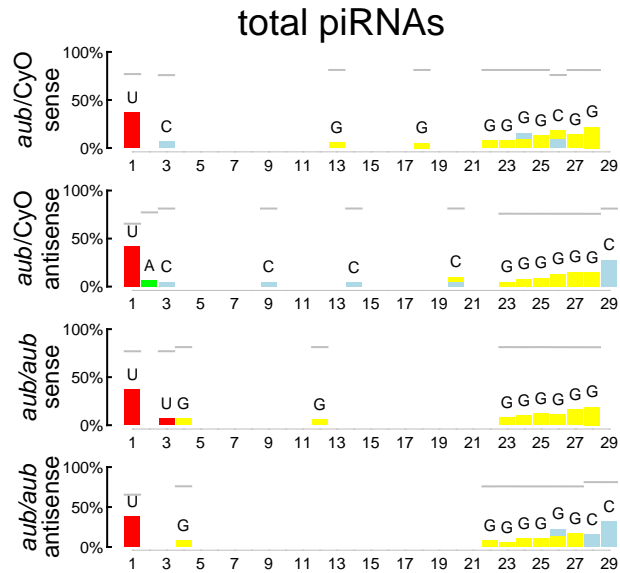


H

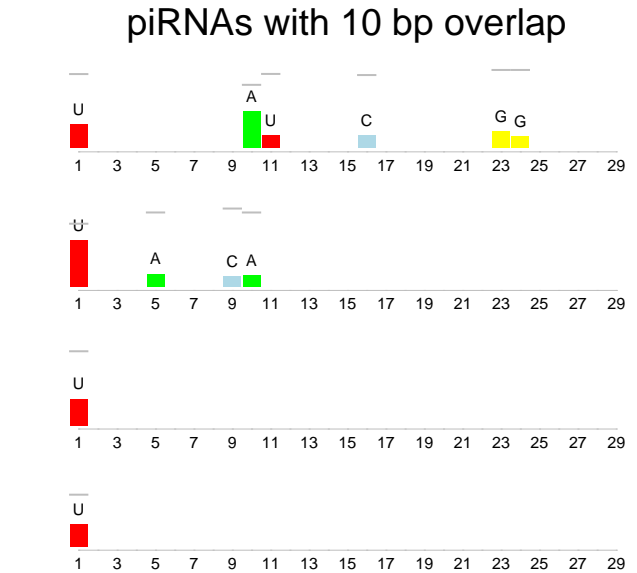


Doc3 element

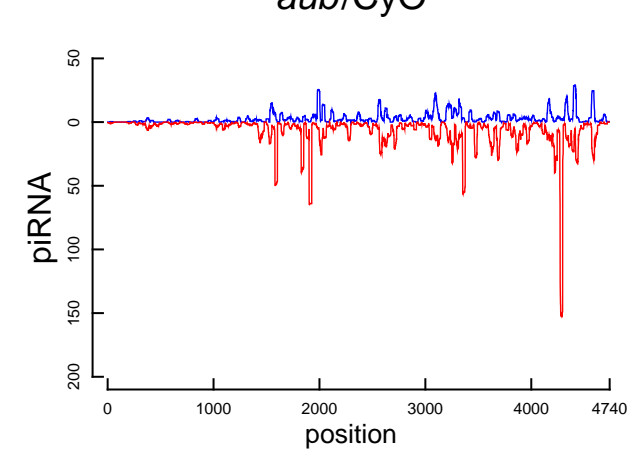
A



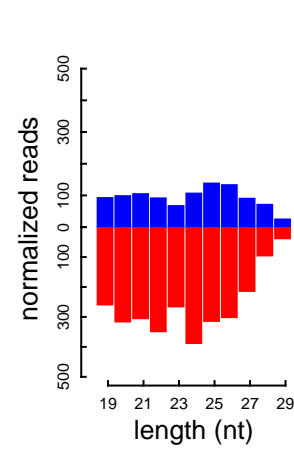
B



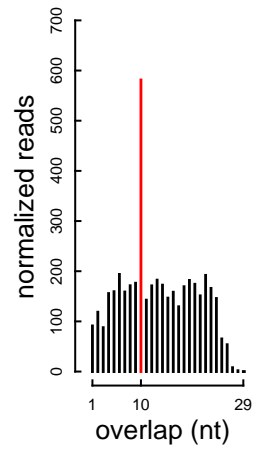
C



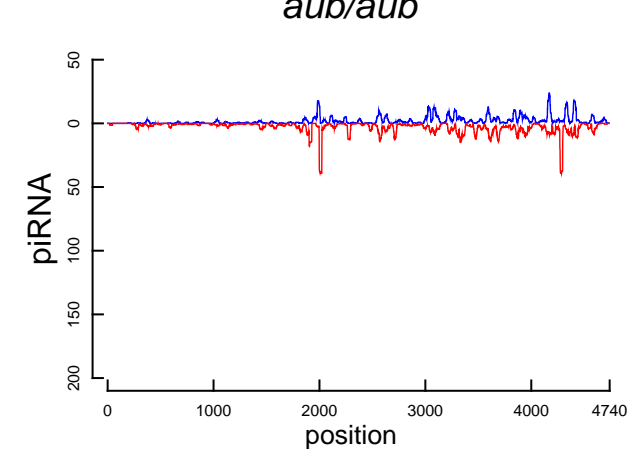
E



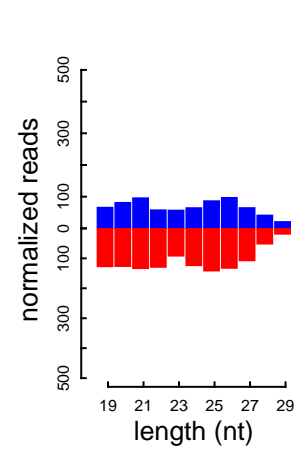
G



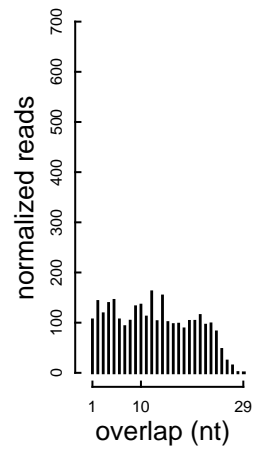
D



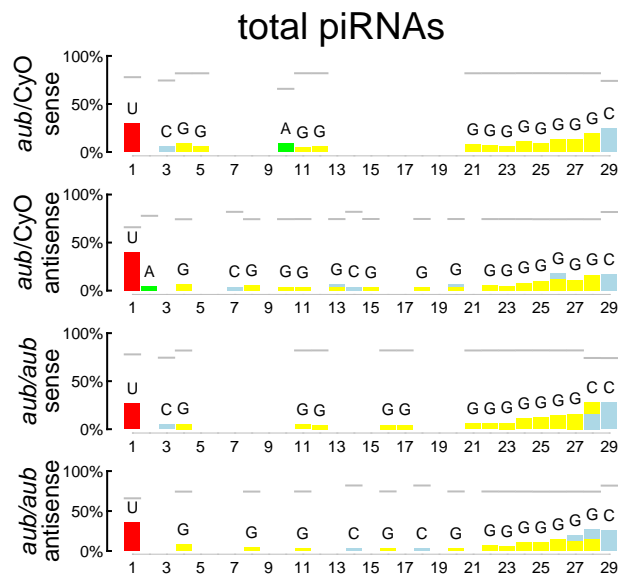
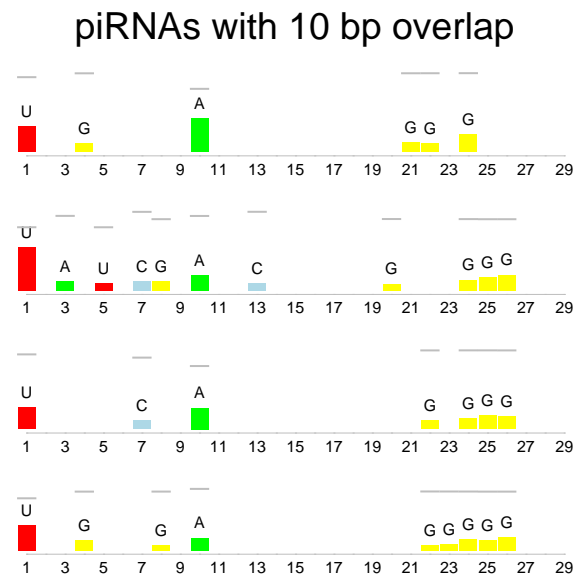
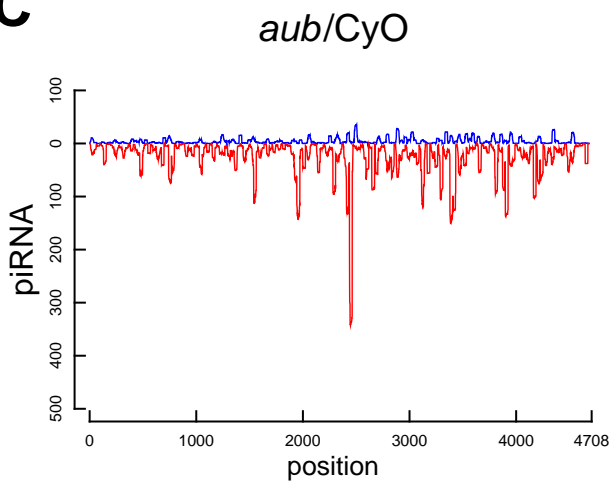
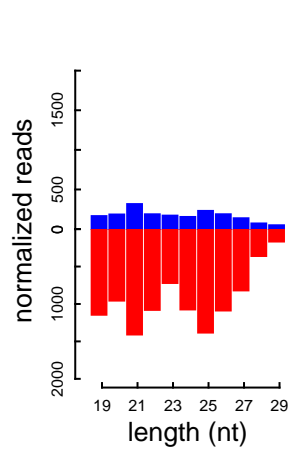
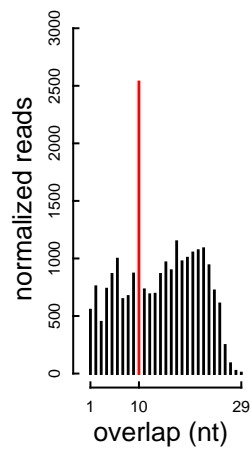
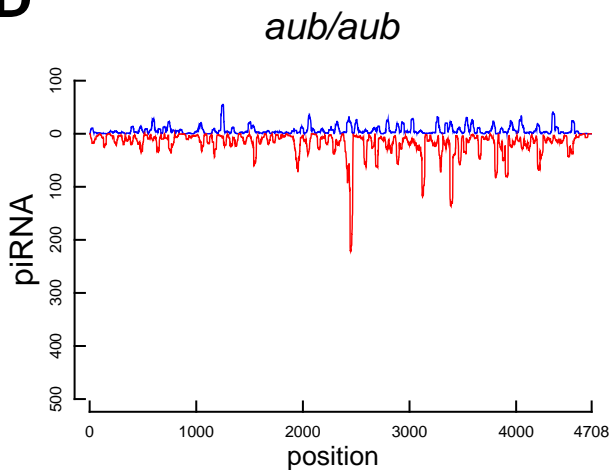
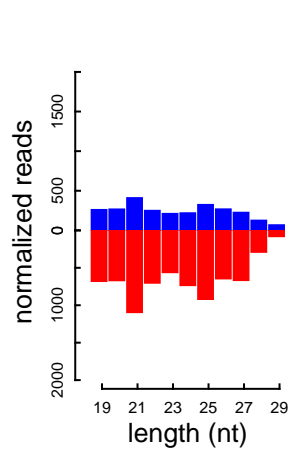
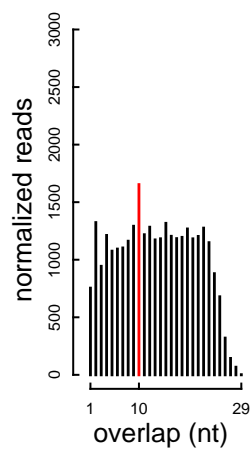
F



H

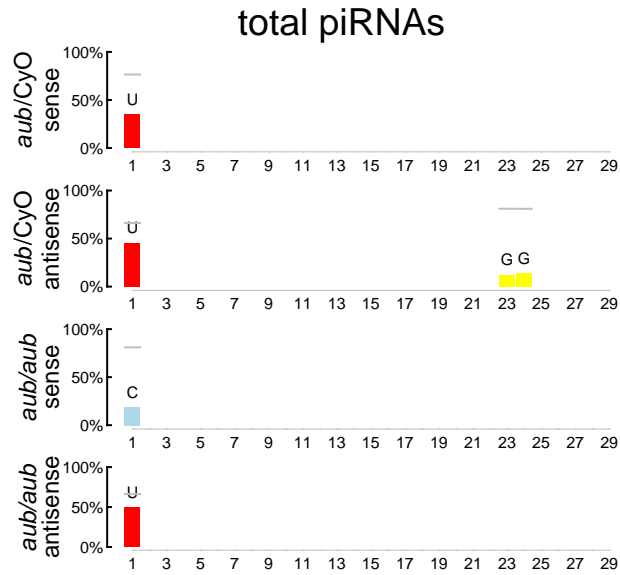


F element

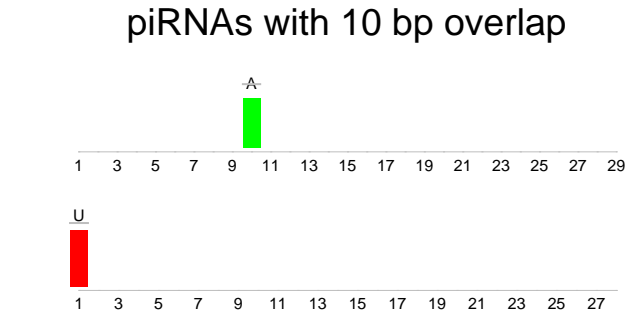
A**B****C****E****G****D****F****H**

flea

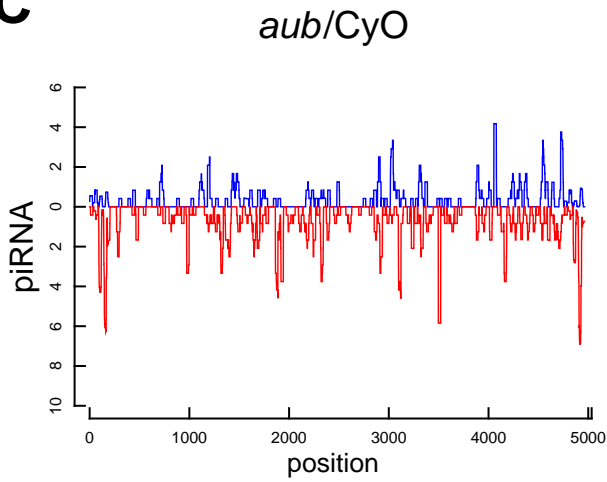
A



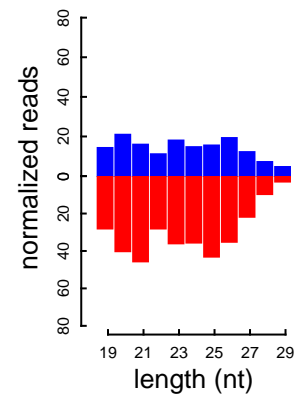
B



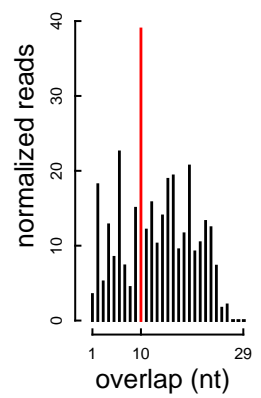
C



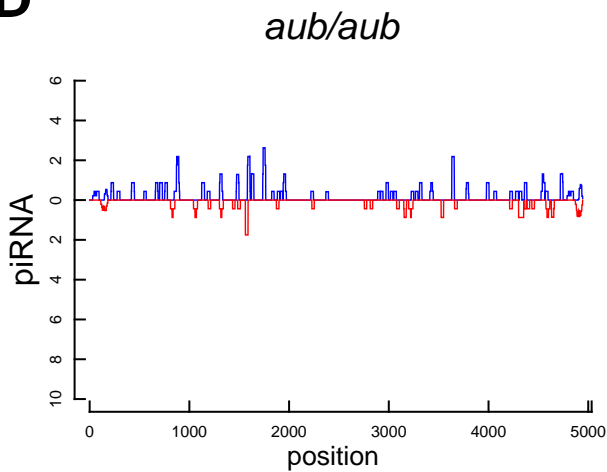
E



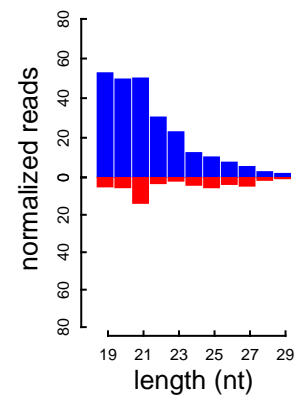
G



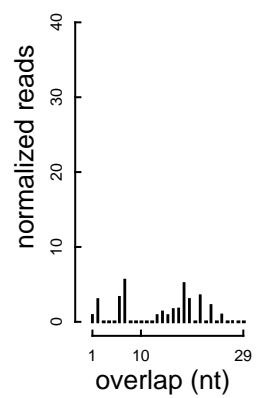
D



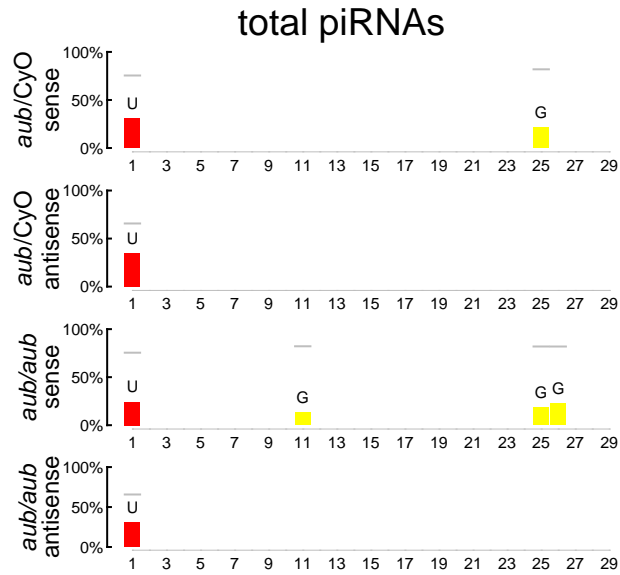
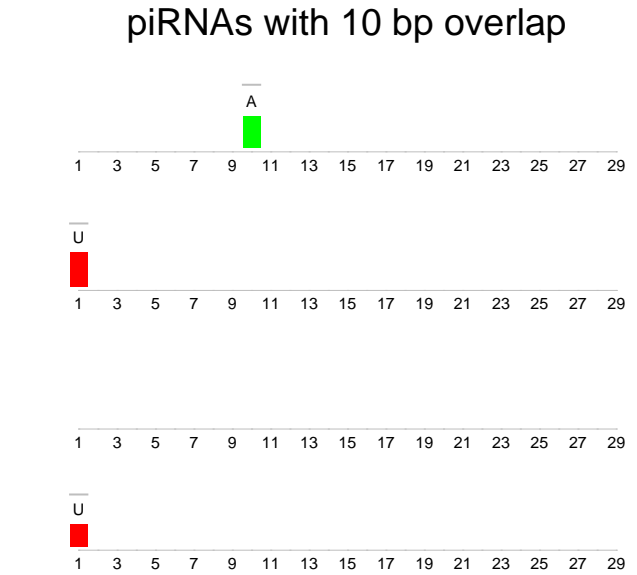
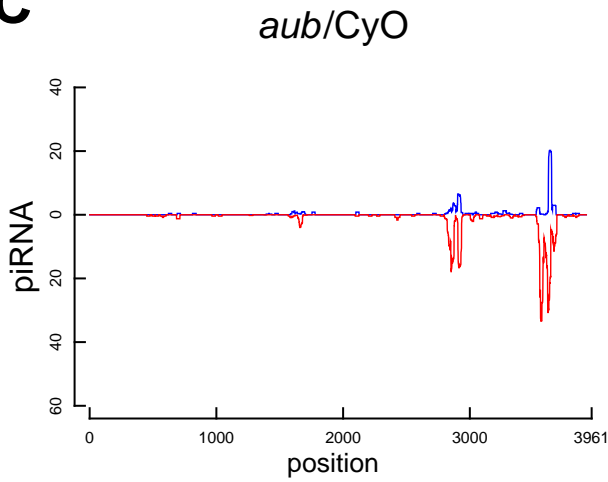
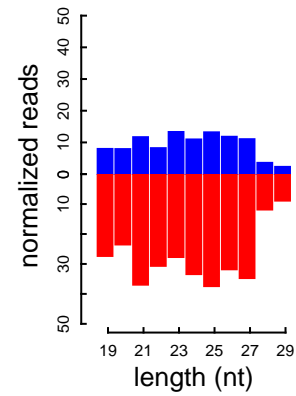
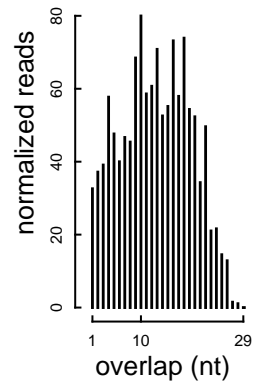
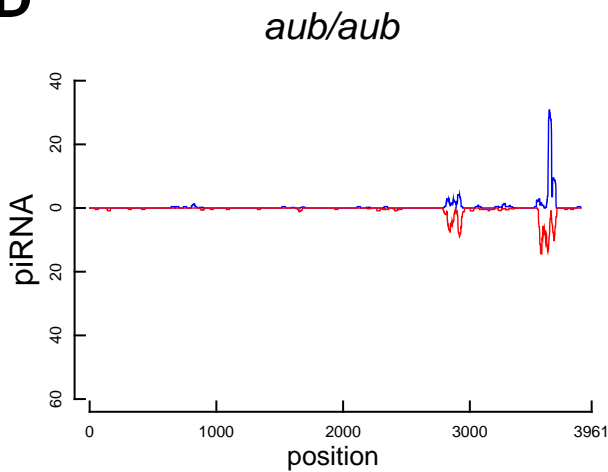
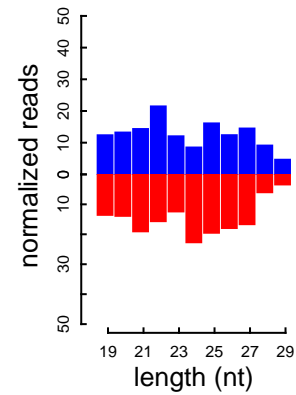
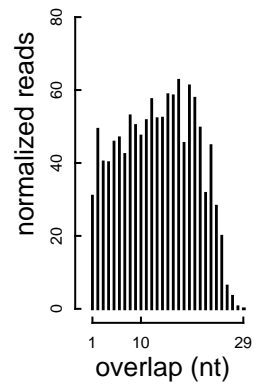
F



H

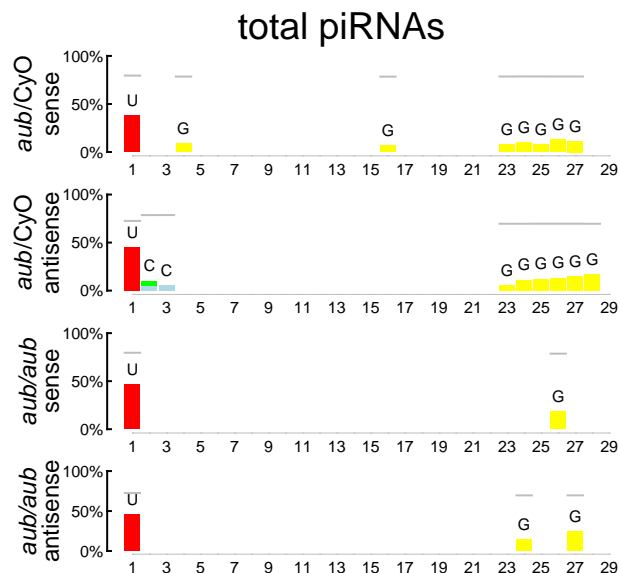


FW2

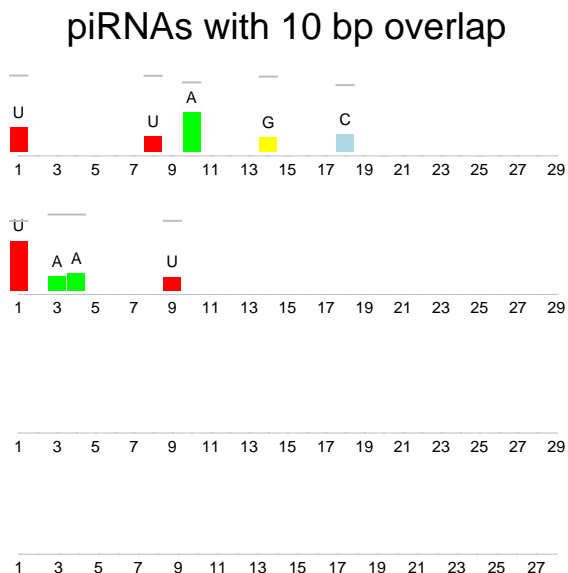
A**B****C****E****G****D****F****H**

G element

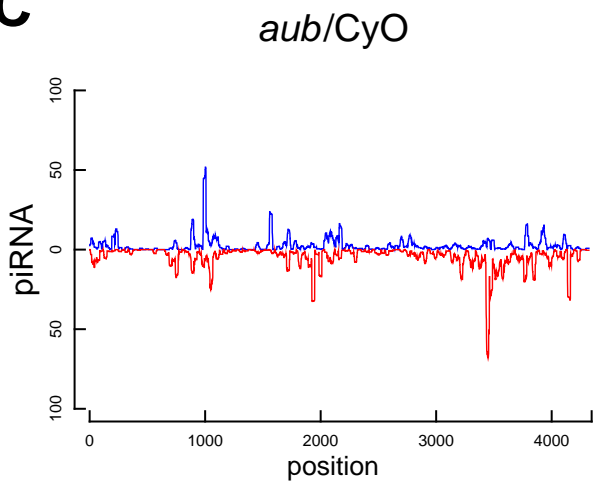
A



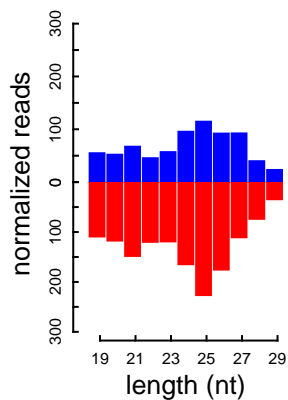
B



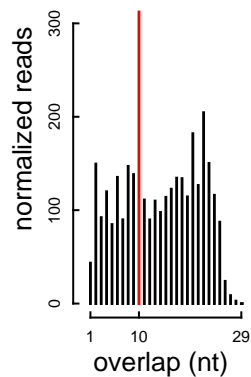
C



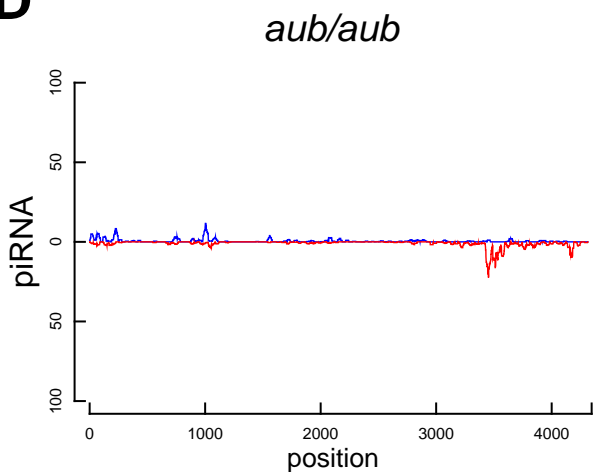
E



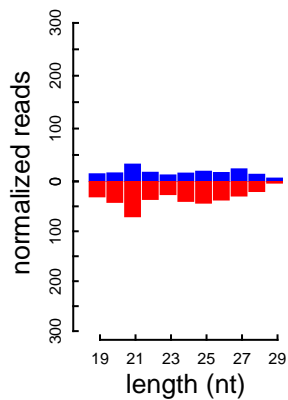
G



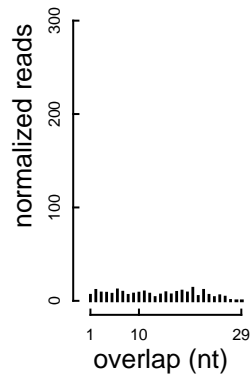
D



F

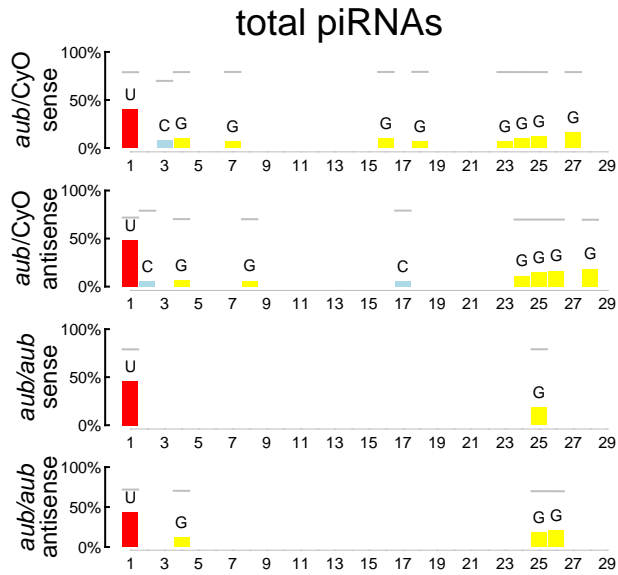


H

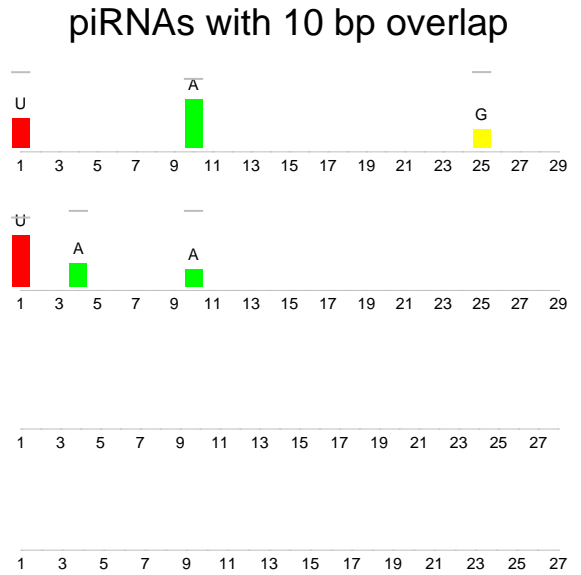


G2

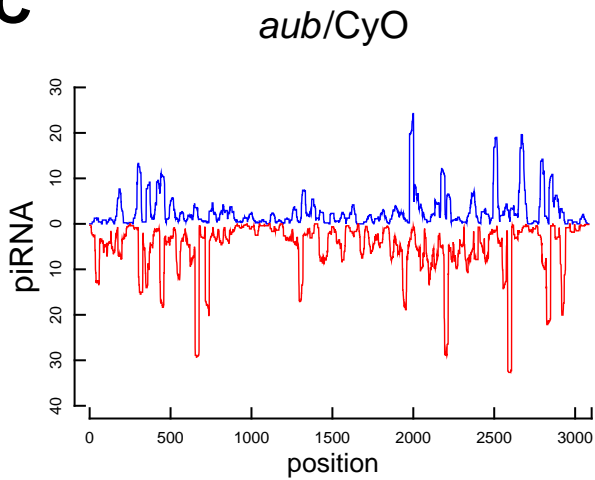
A



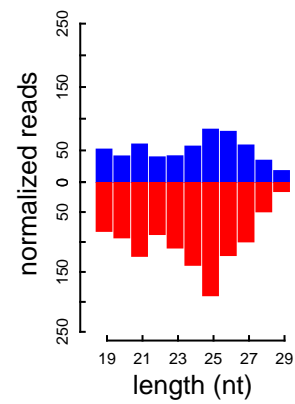
B



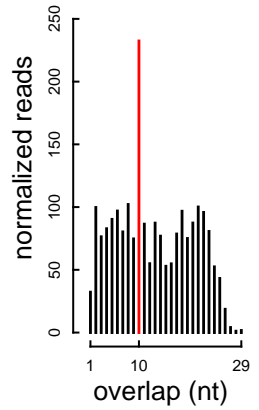
C



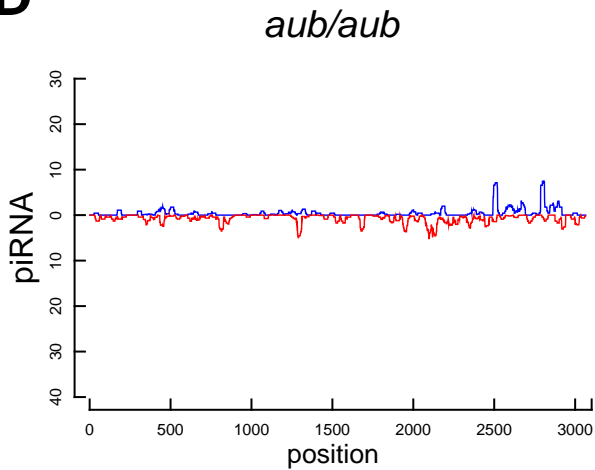
E



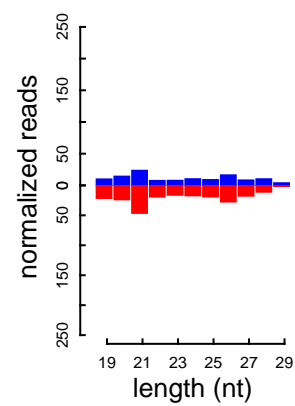
G



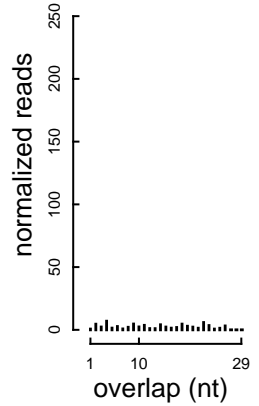
D



F

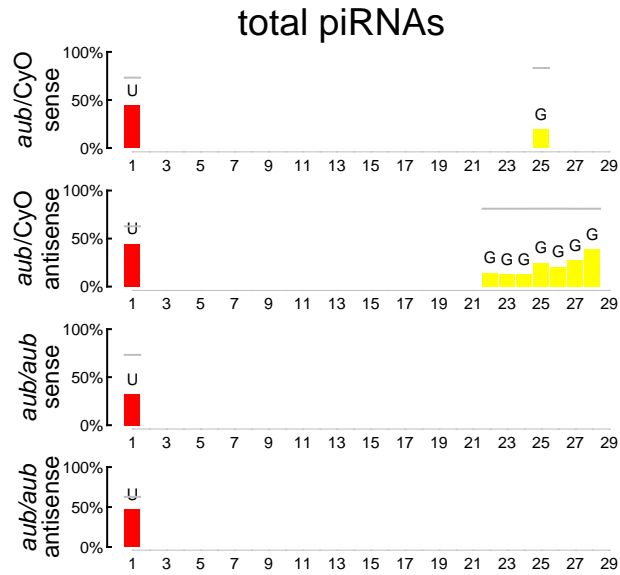


H

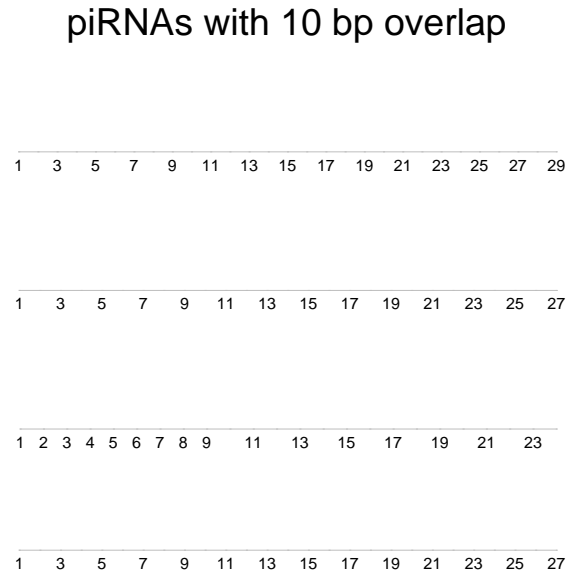


G4

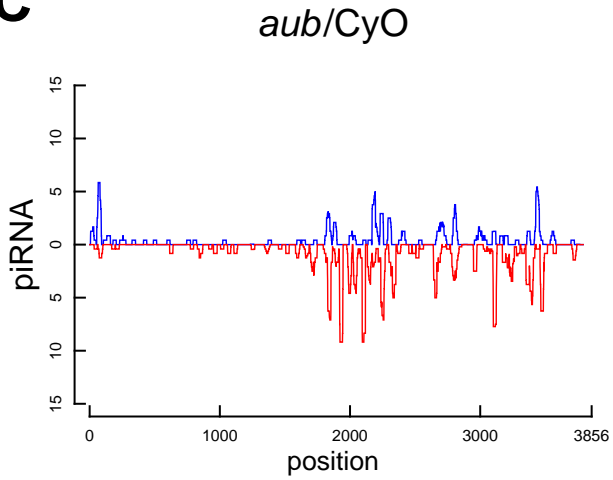
A



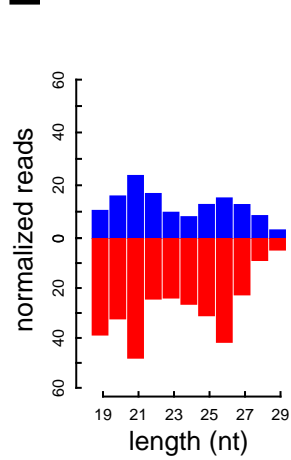
B



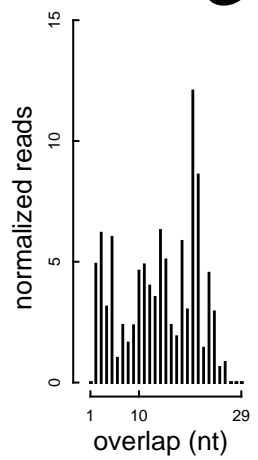
C



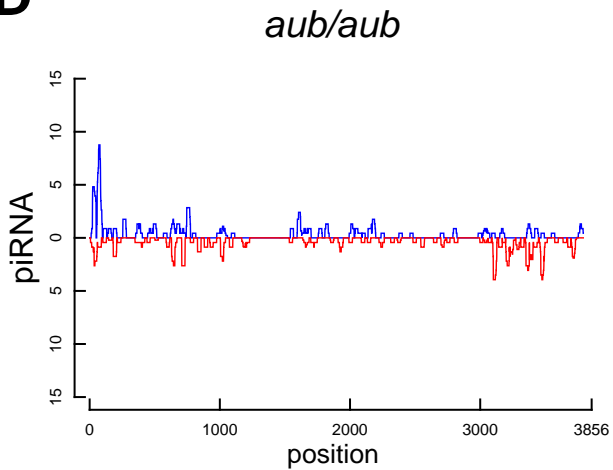
E



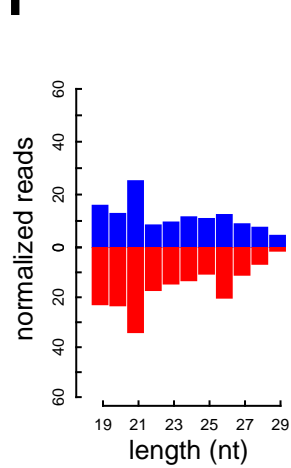
G



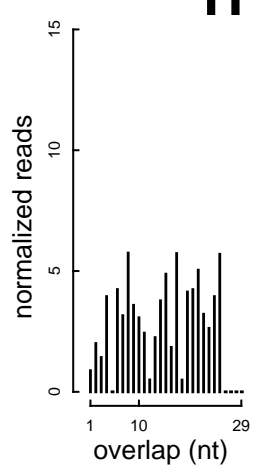
D



F



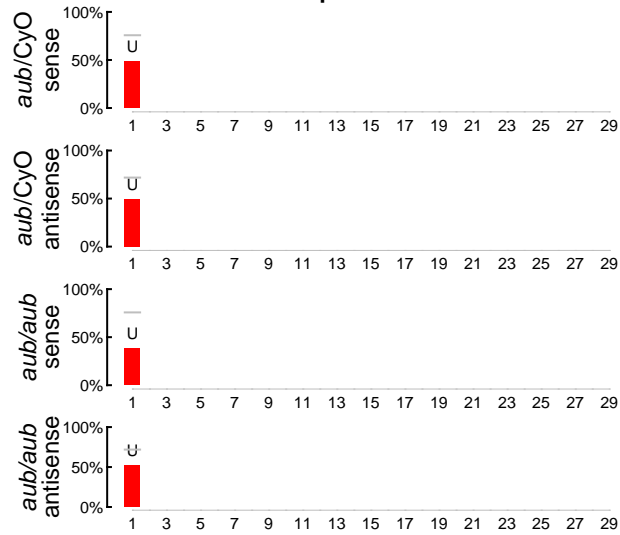
H



G5

A

total piRNAs



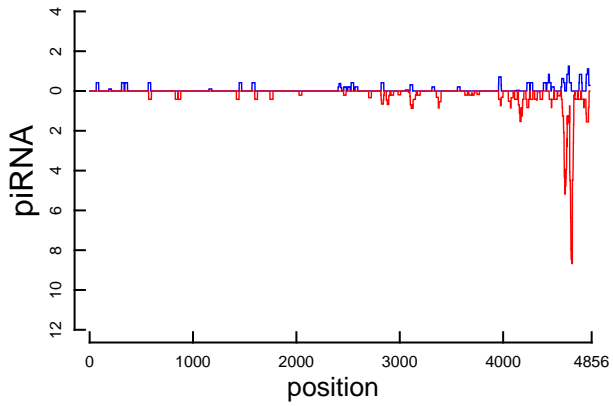
B

piRNAs with 10 bp overlap

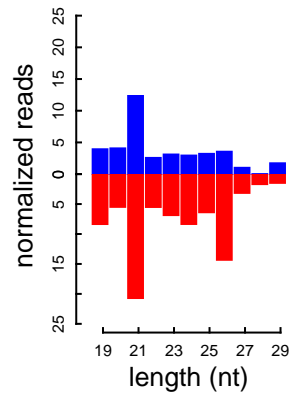


C

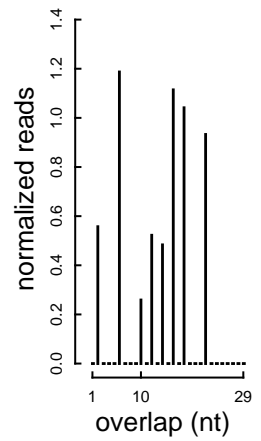
aub/CyO



E

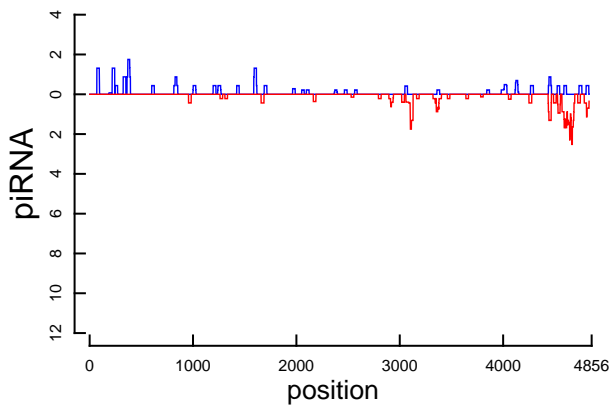


G

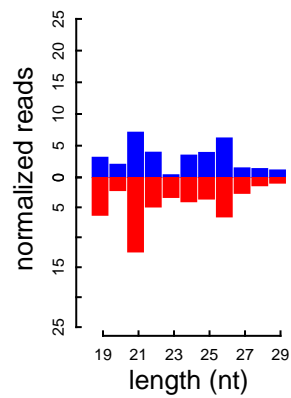


D

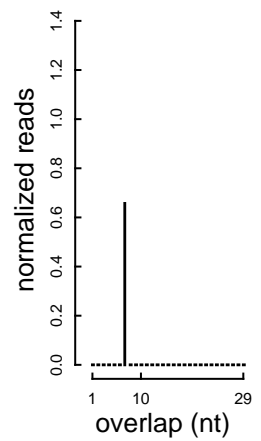
aub/aub



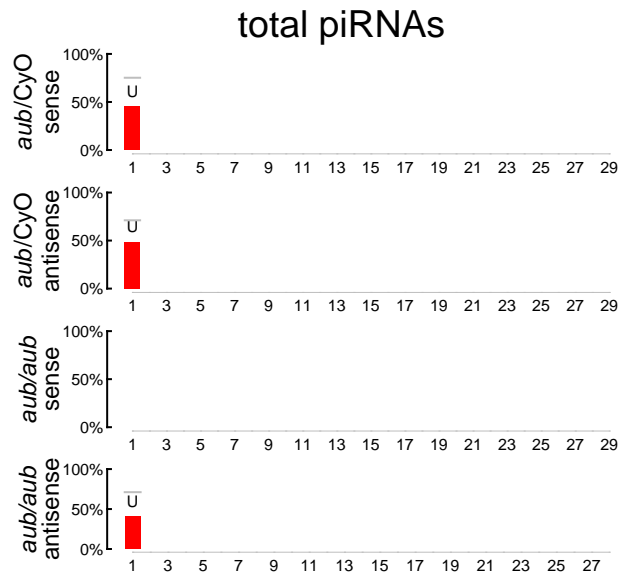
F



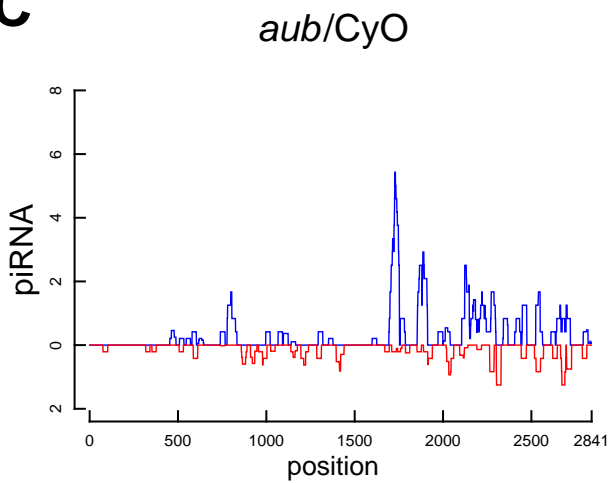
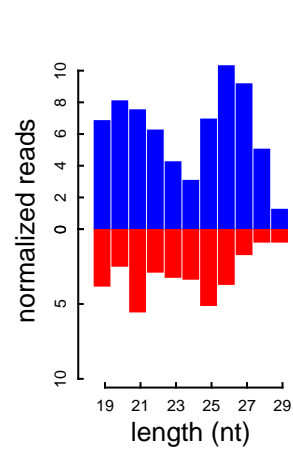
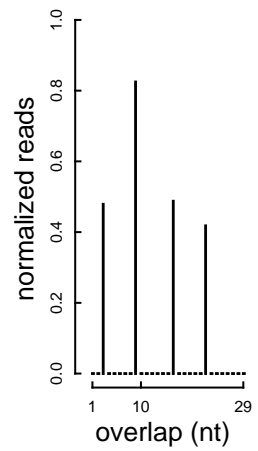
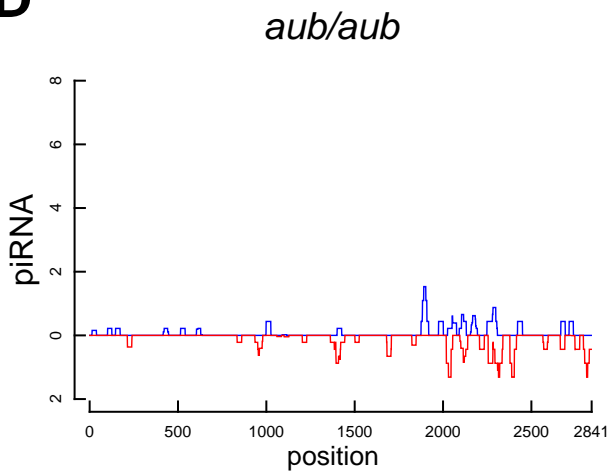
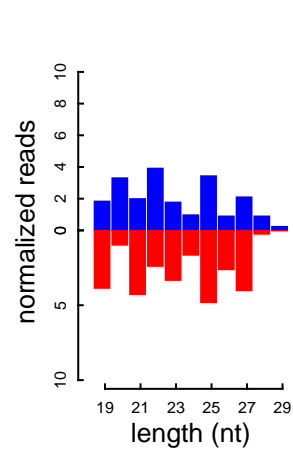
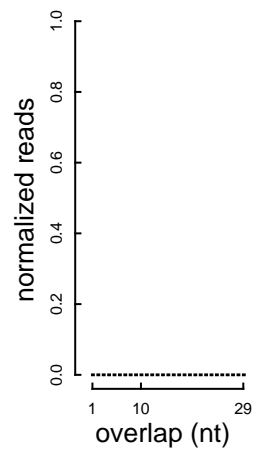
H



G5A

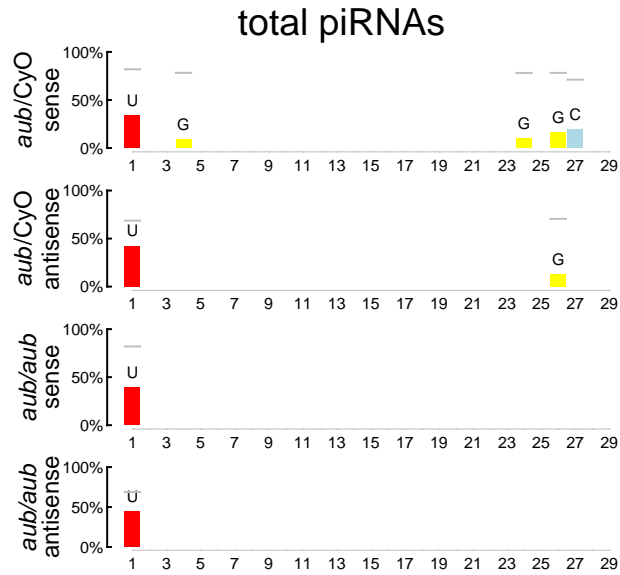
A**B**

piRNAs with 10 bp overlap

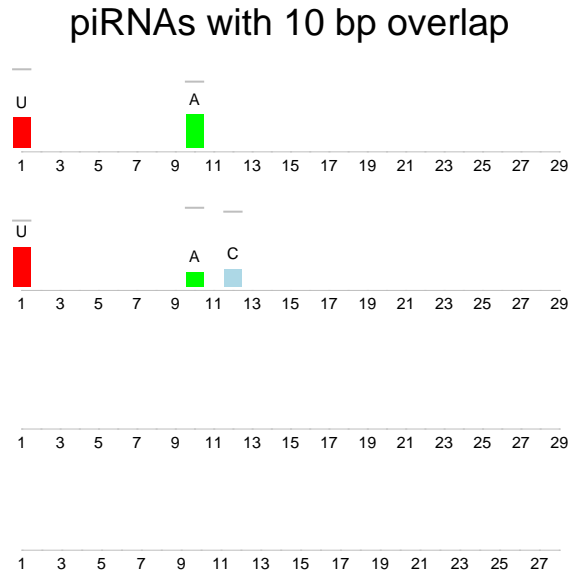
C**E****G****D****F****H**

G6

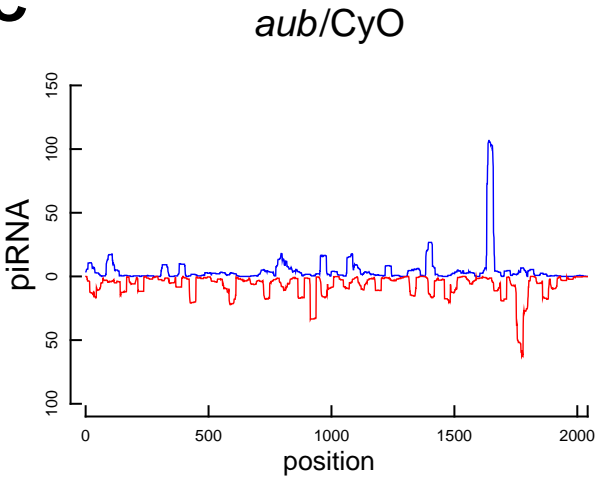
A



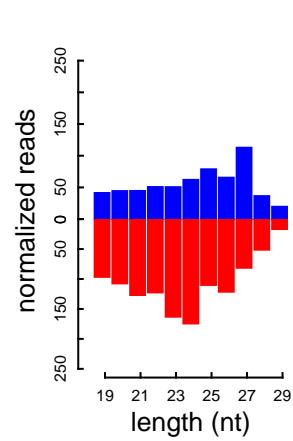
B



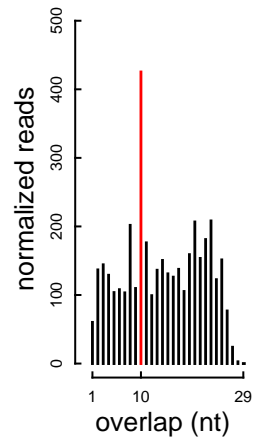
C



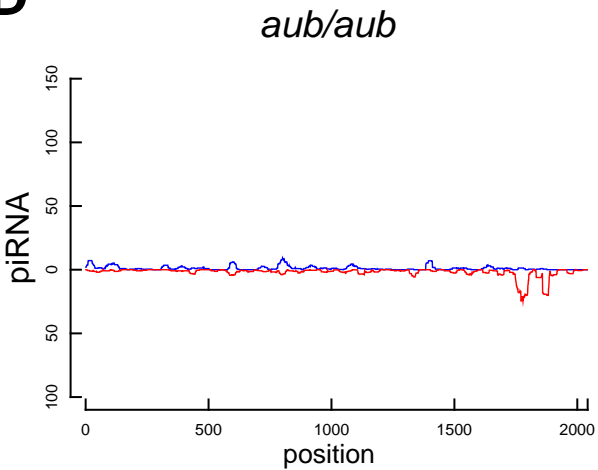
E



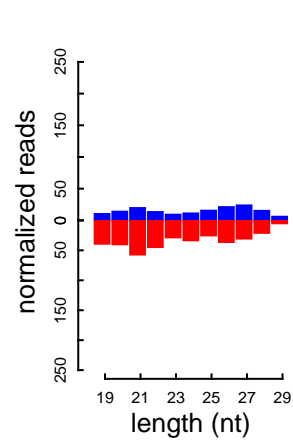
G



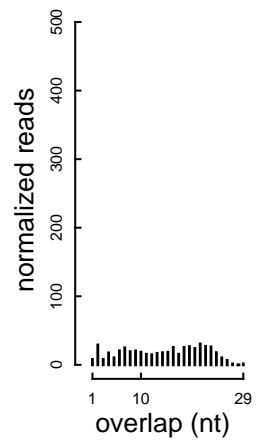
D



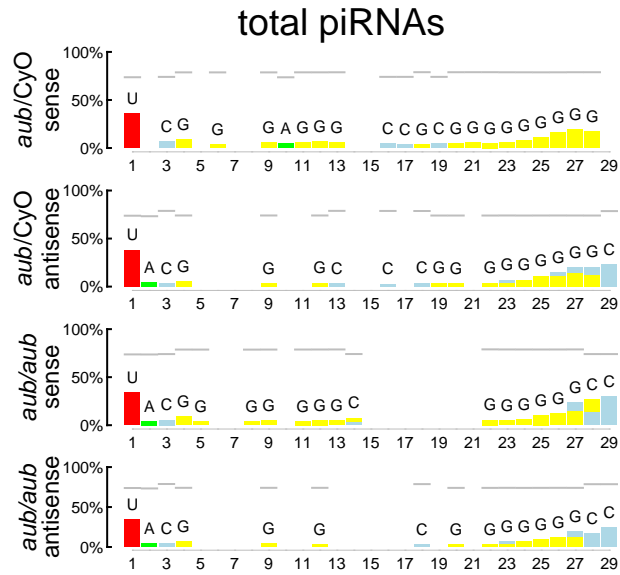
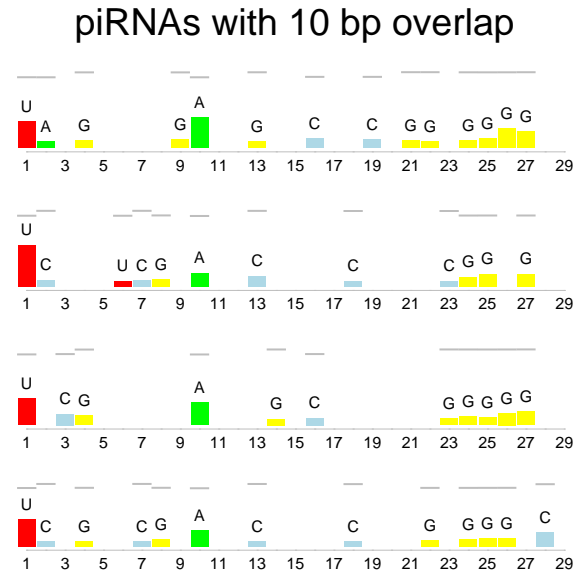
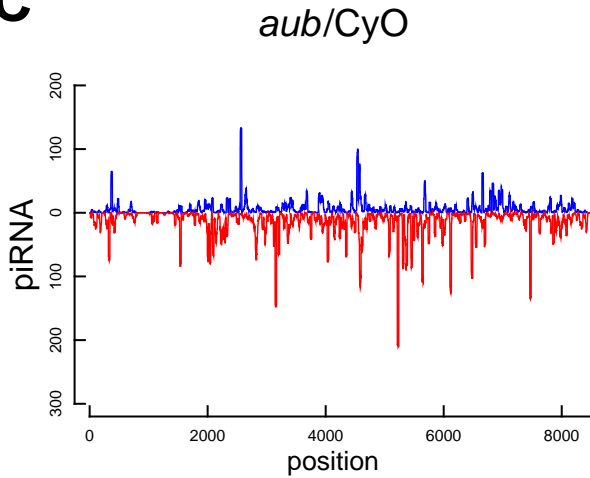
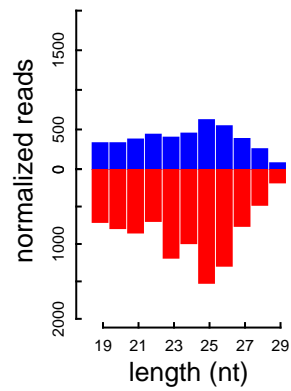
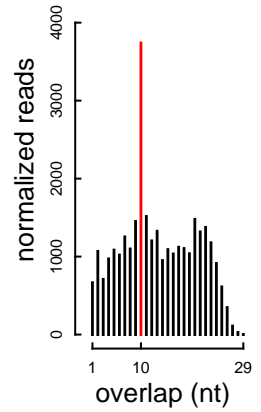
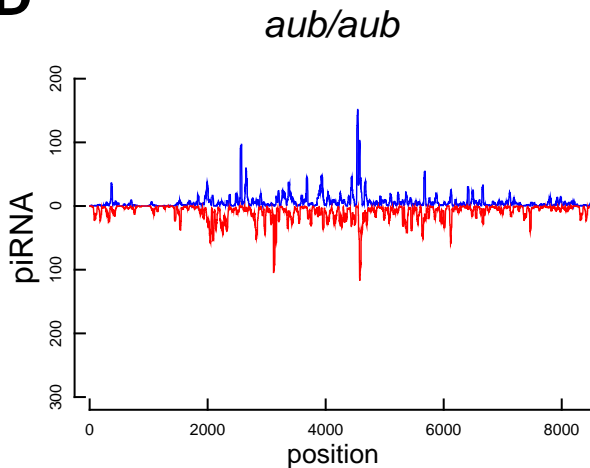
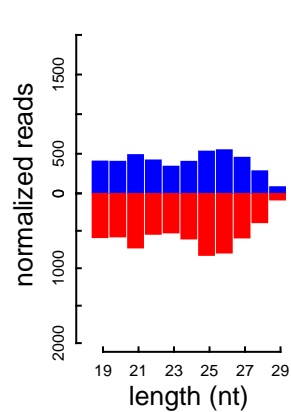
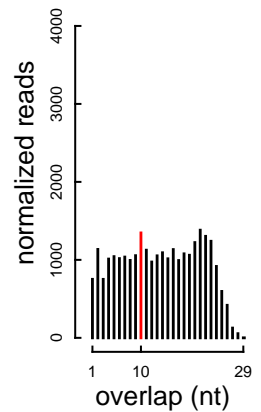
F



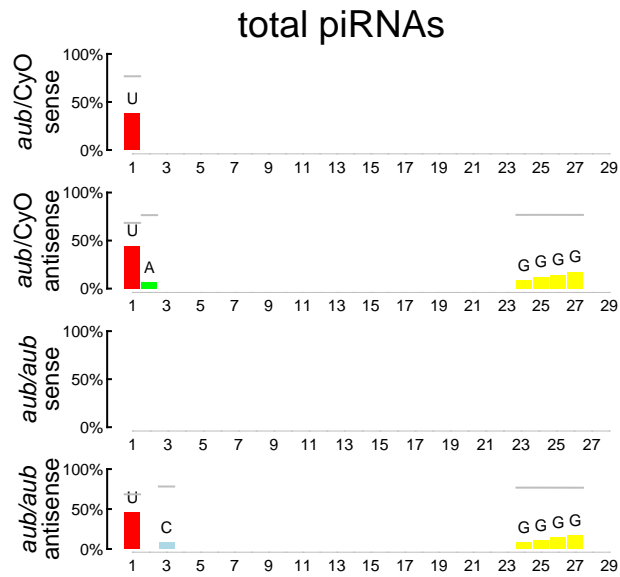
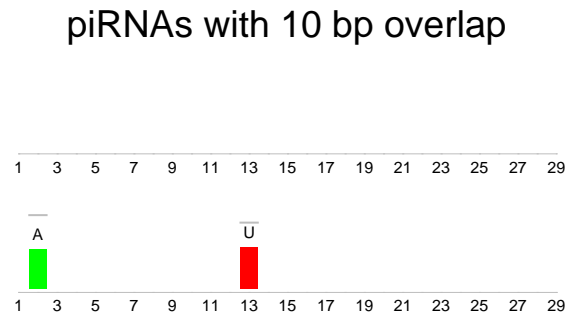
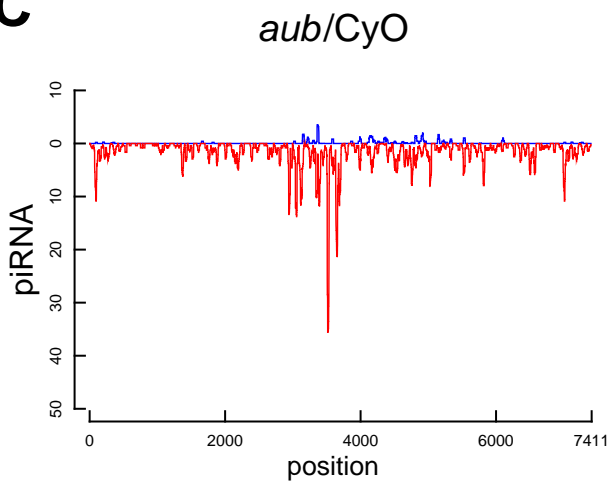
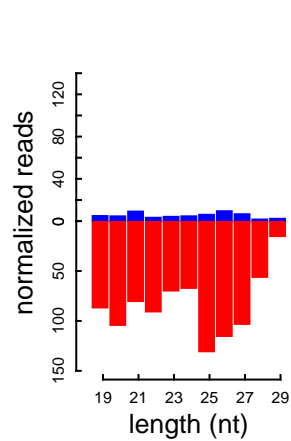
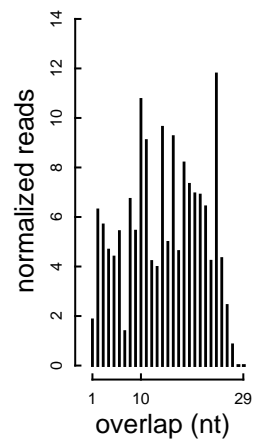
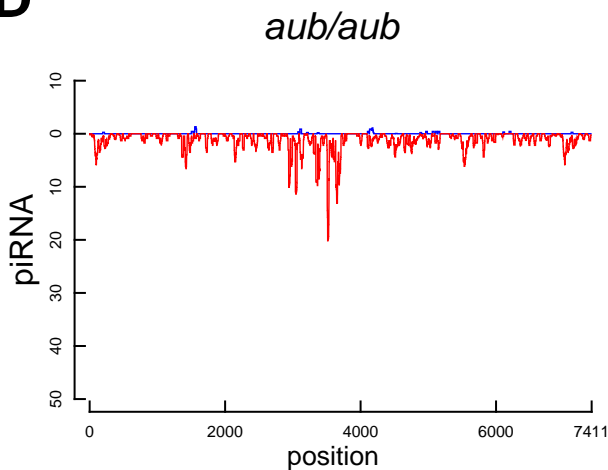
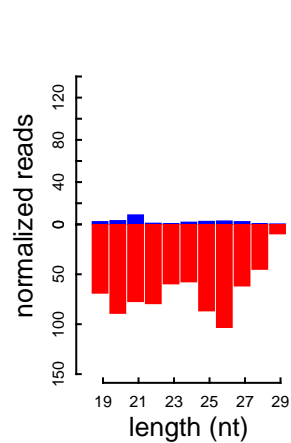
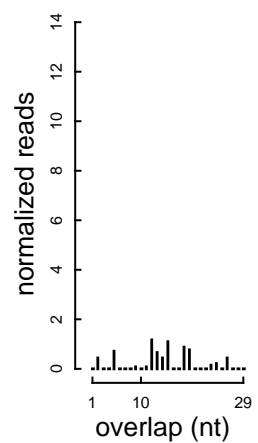
H



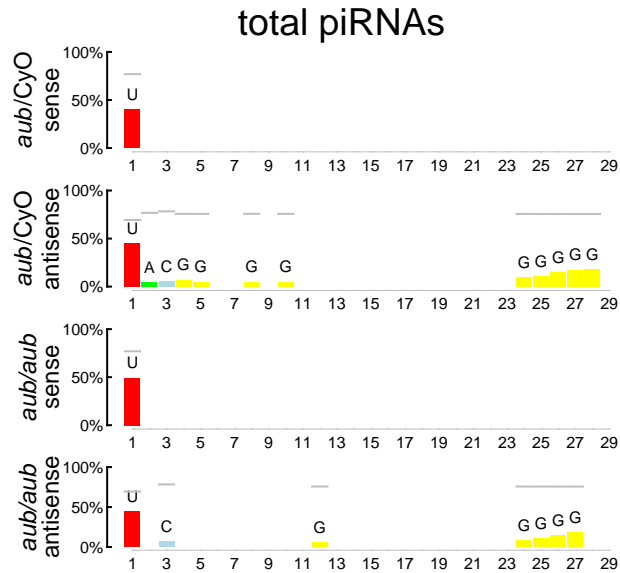
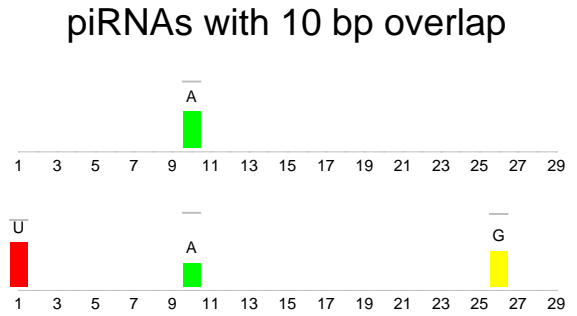
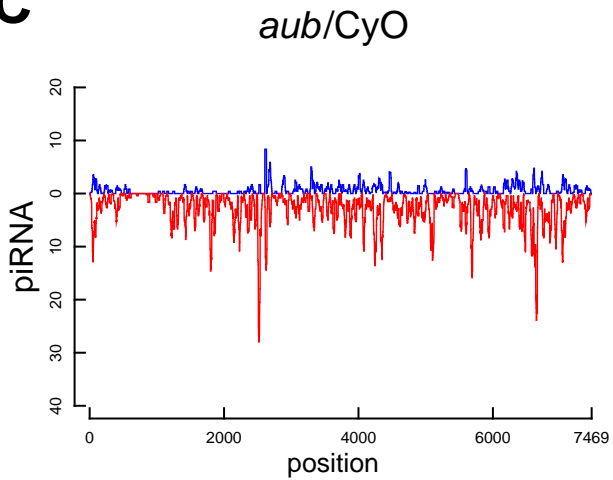
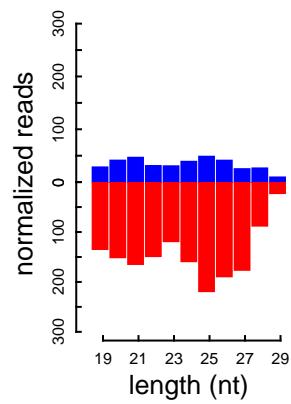
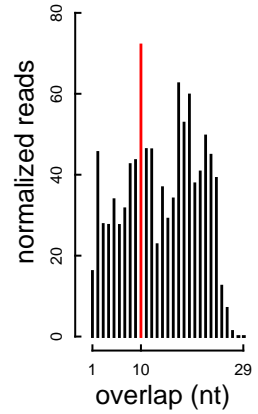
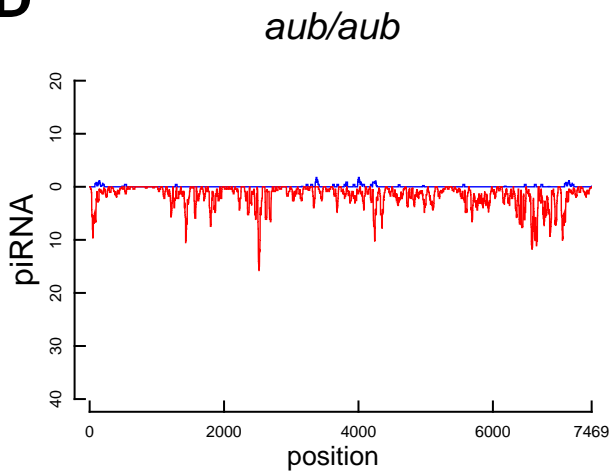
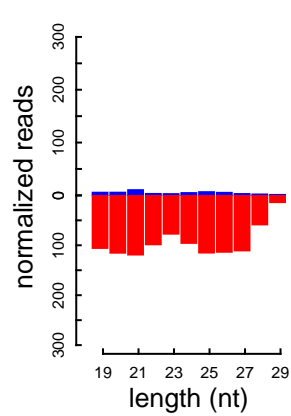
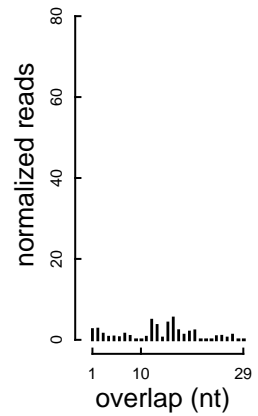
GATE

A**B****C****E****G****D****F****H**

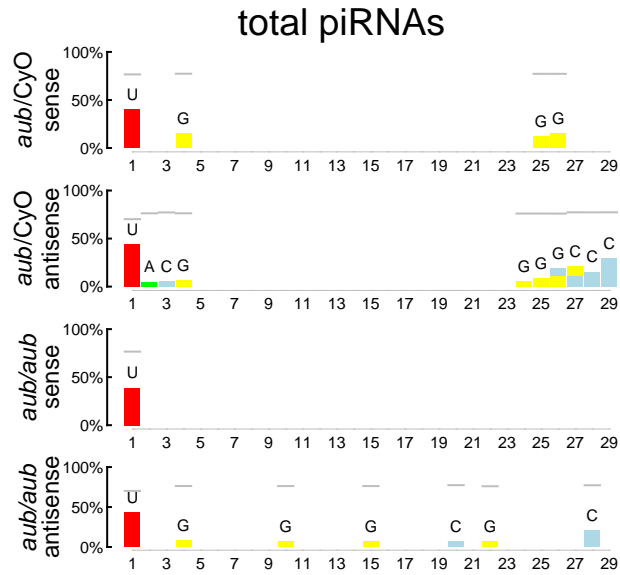
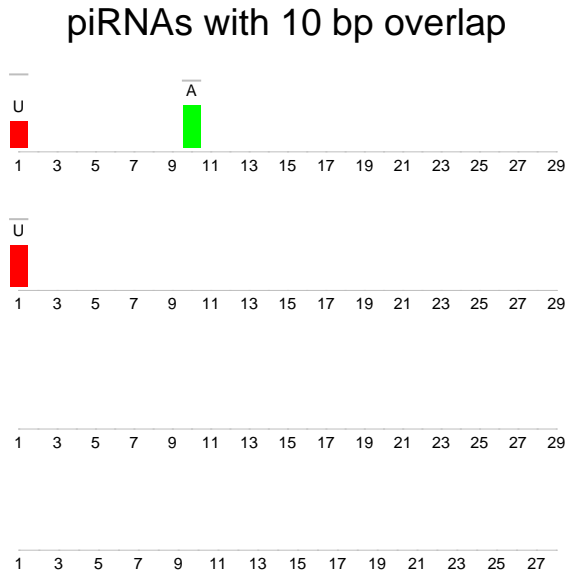
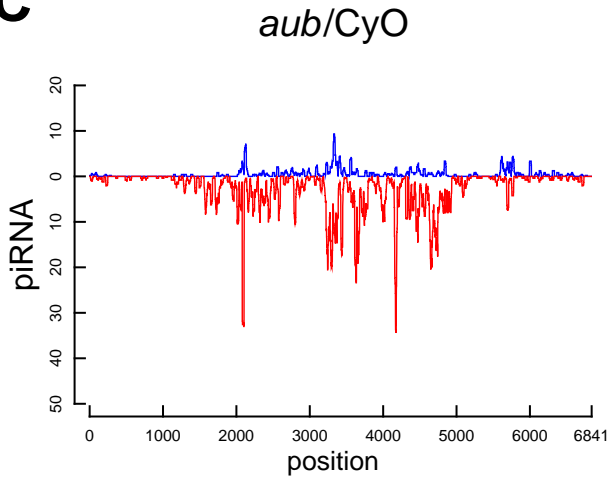
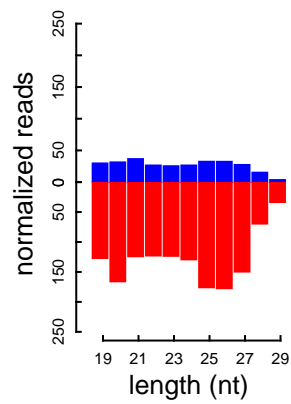
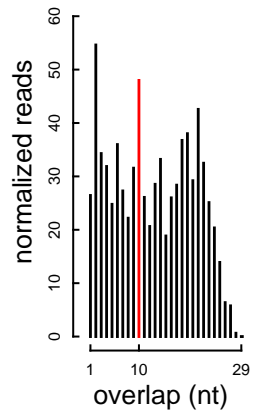
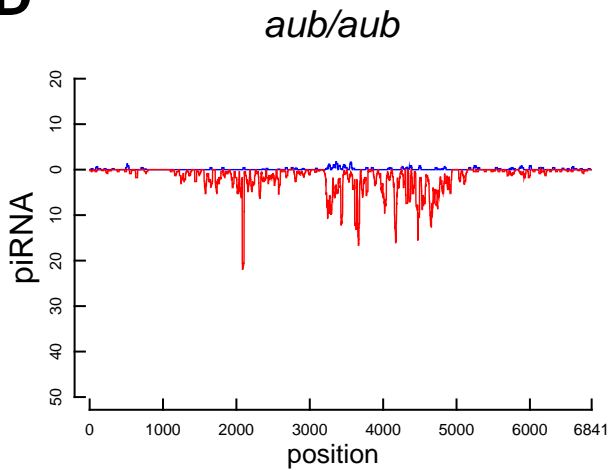
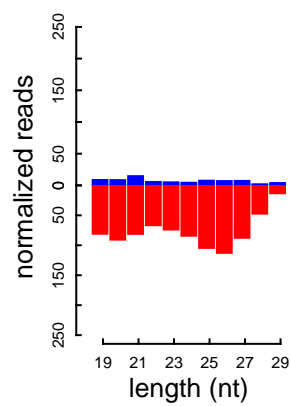
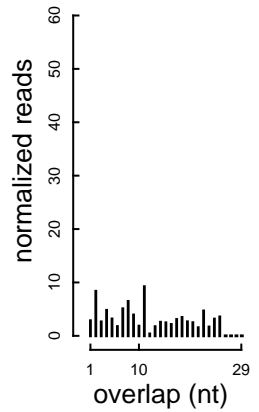
gtwin

A**B****C****E****G****D****F****H**

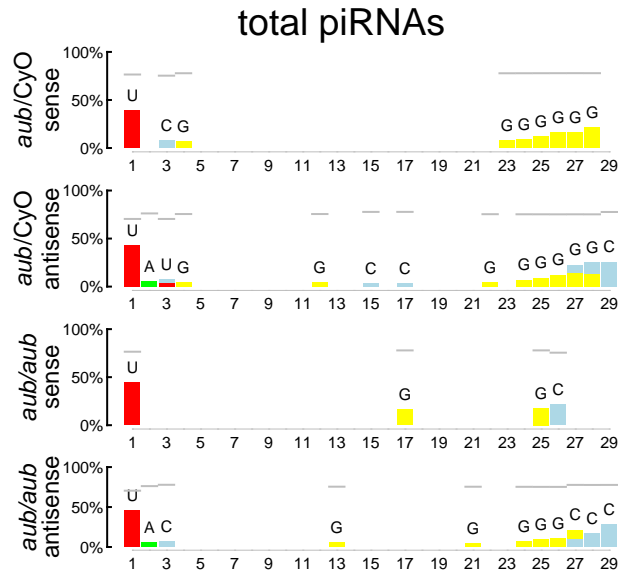
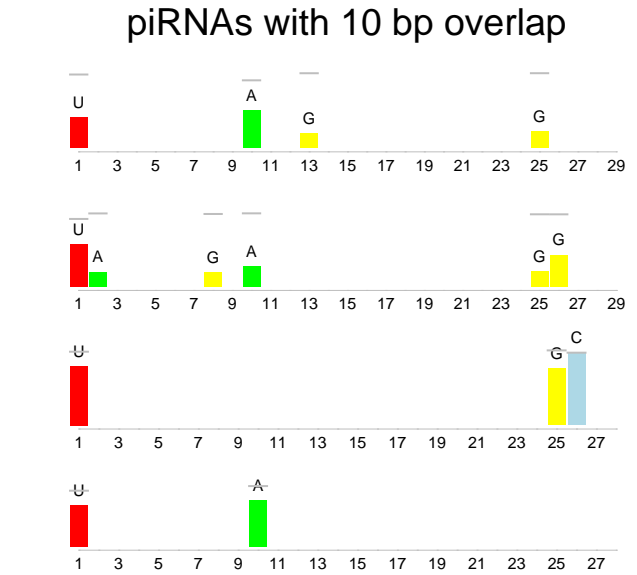
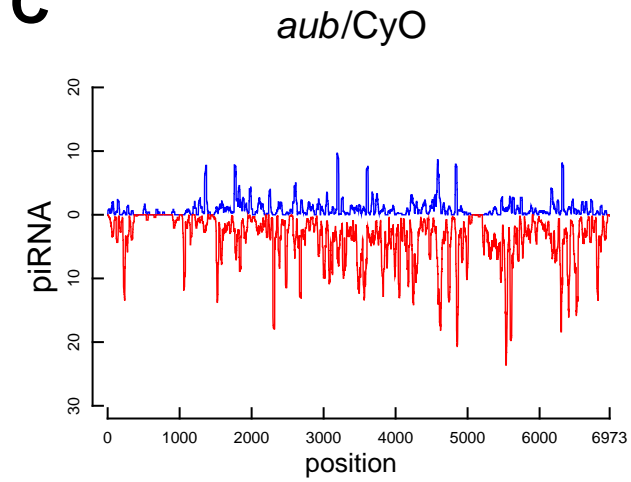
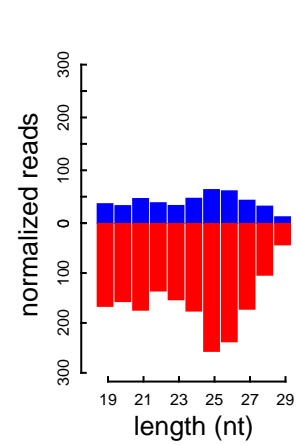
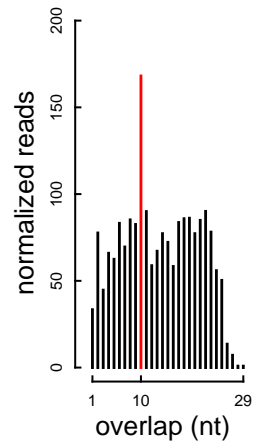
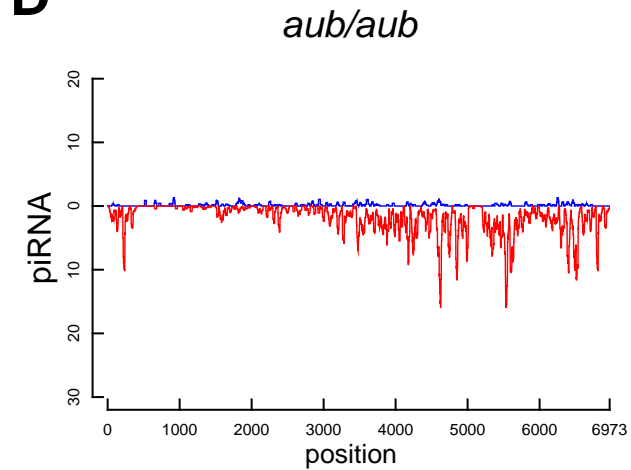
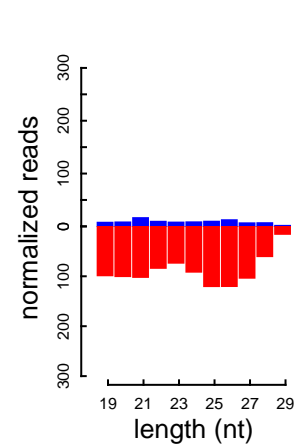
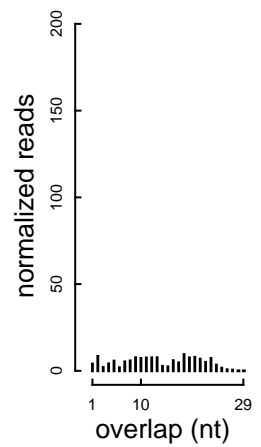
gypsy

A**B****C****E****G****D****F****H**

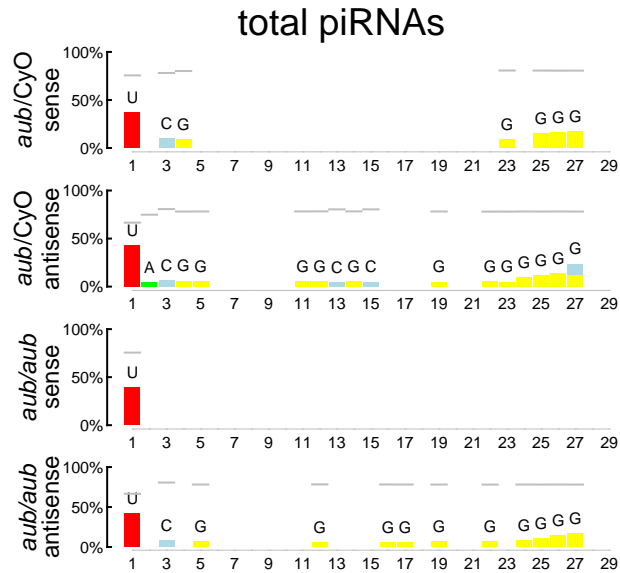
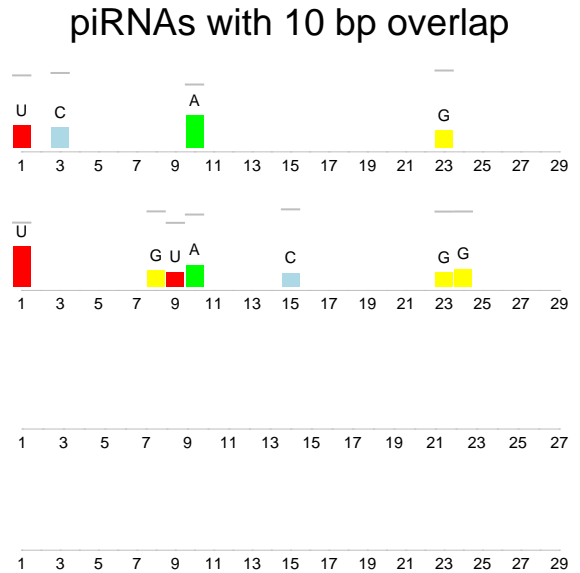
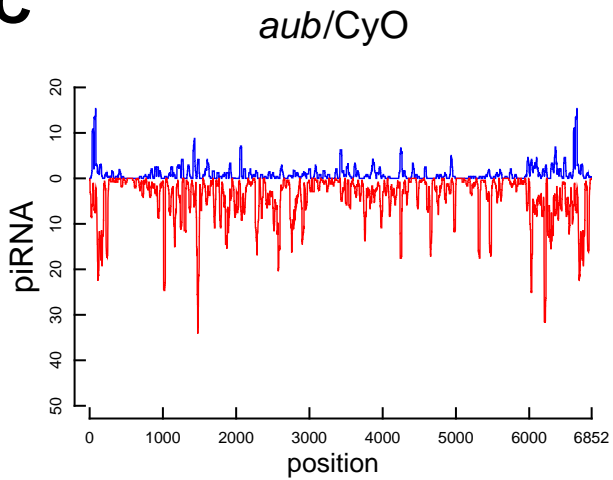
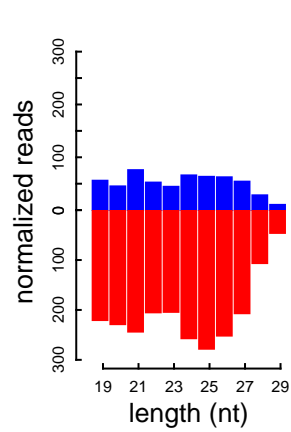
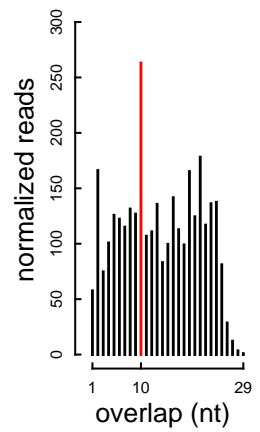
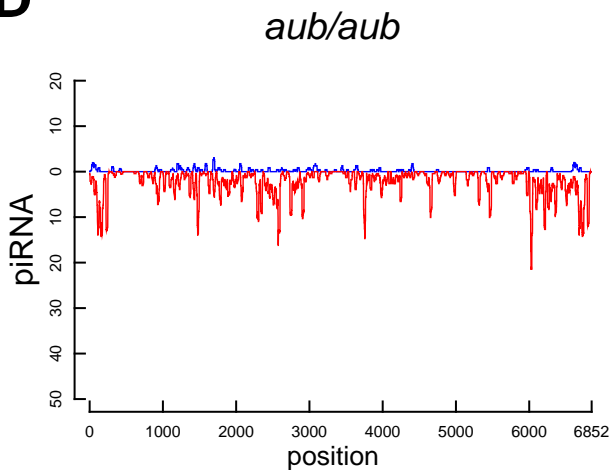
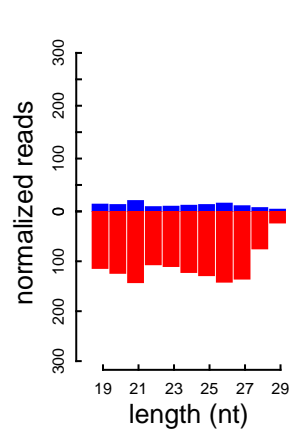
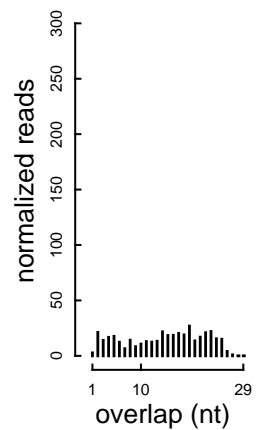
gypsy2

A**B****C****E****G****D****F****H**

gypsy3

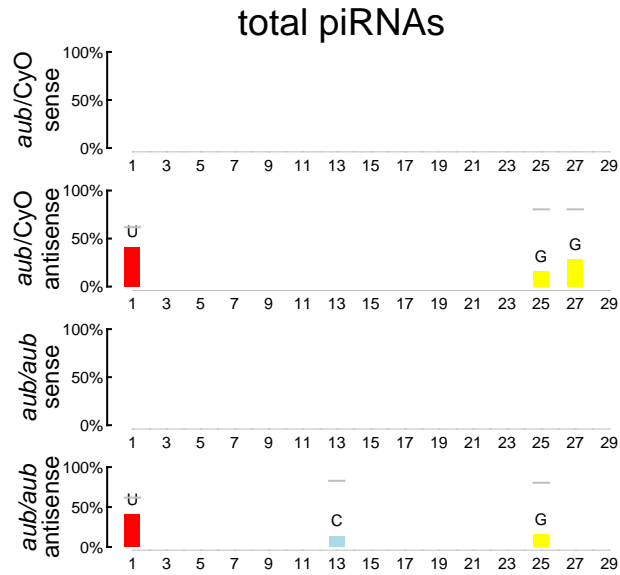
A**B****C****E****G****D****F****H**

gypsy4

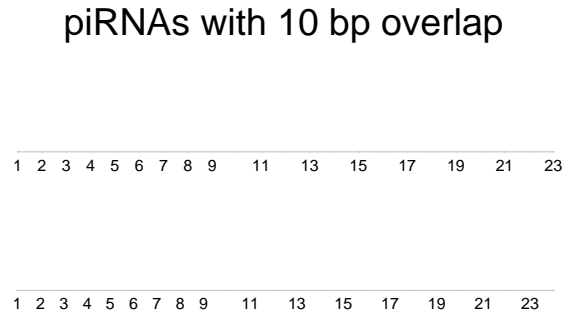
A**B****C****E****G****D****F****H**

gypsy5

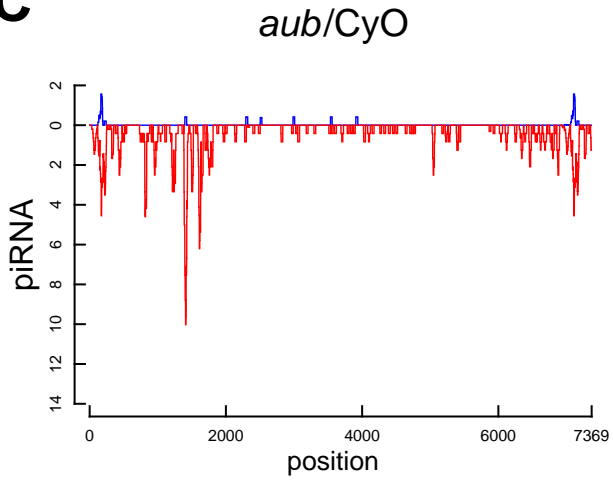
A



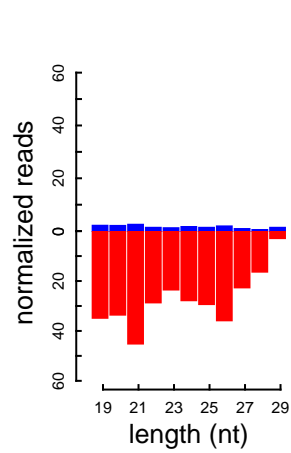
B



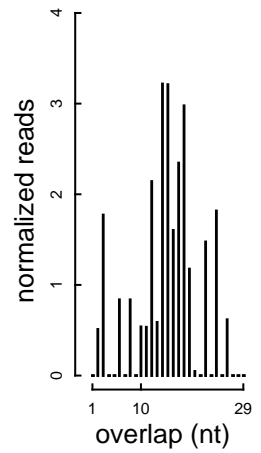
C



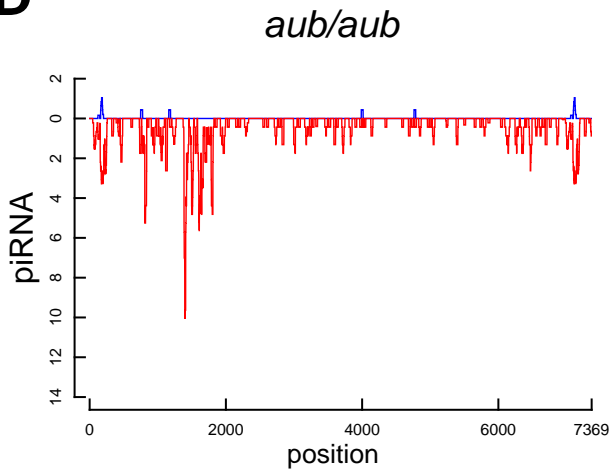
E



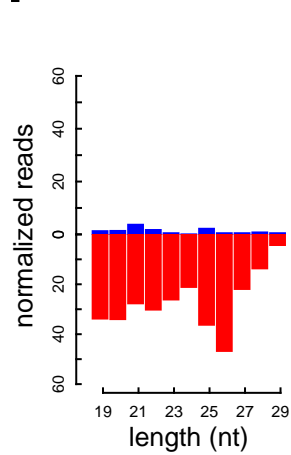
G



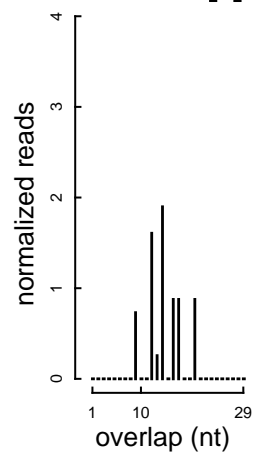
D



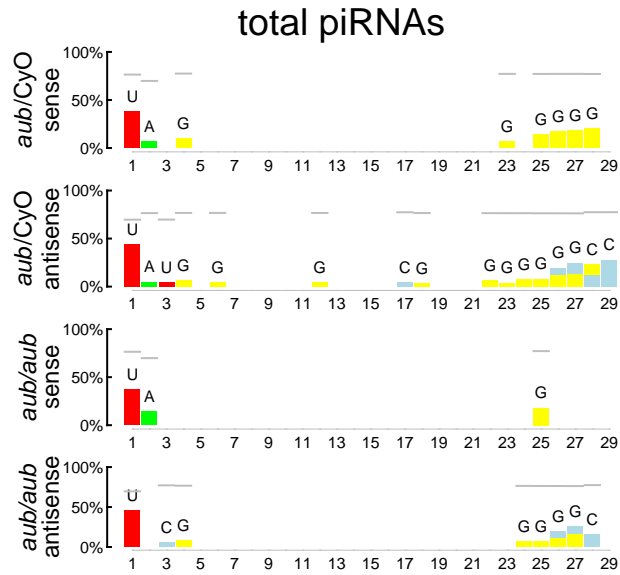
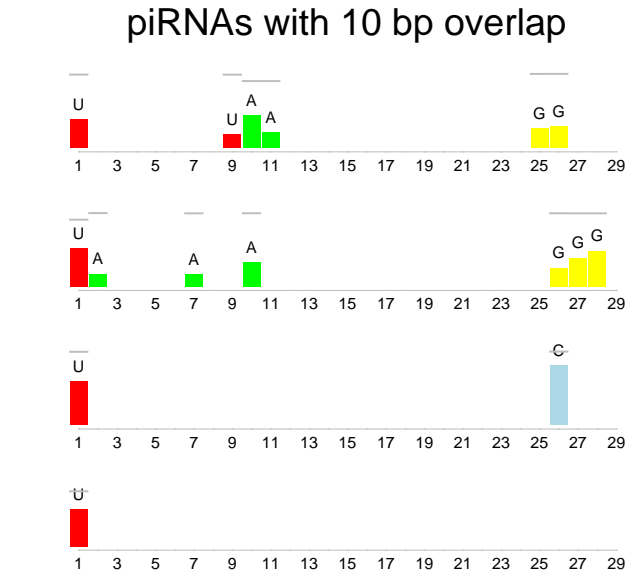
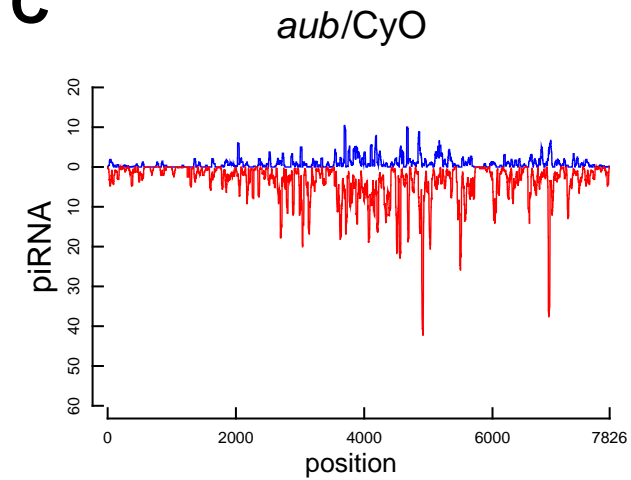
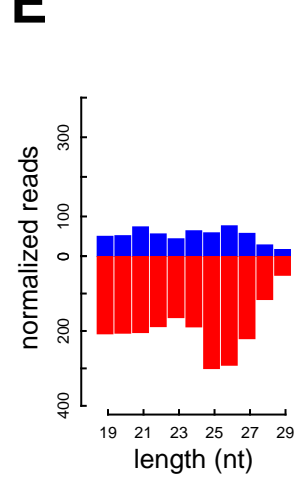
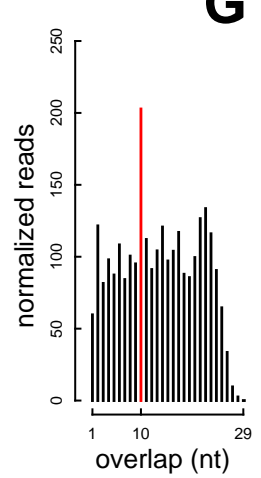
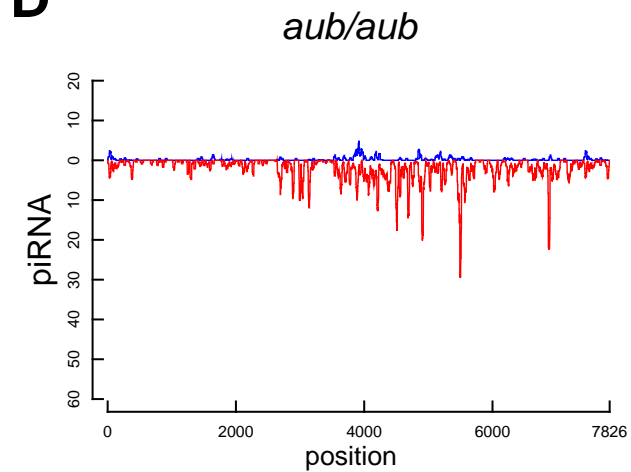
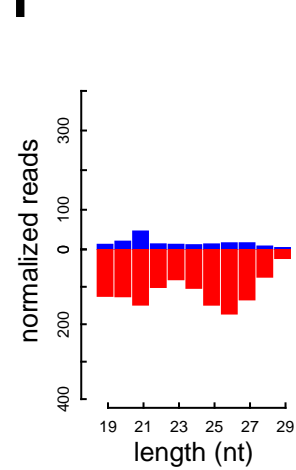
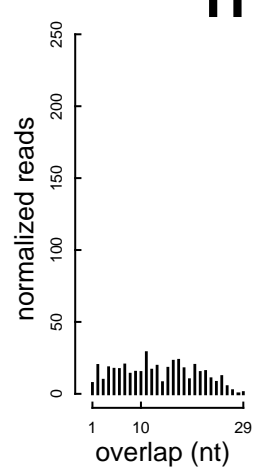
F



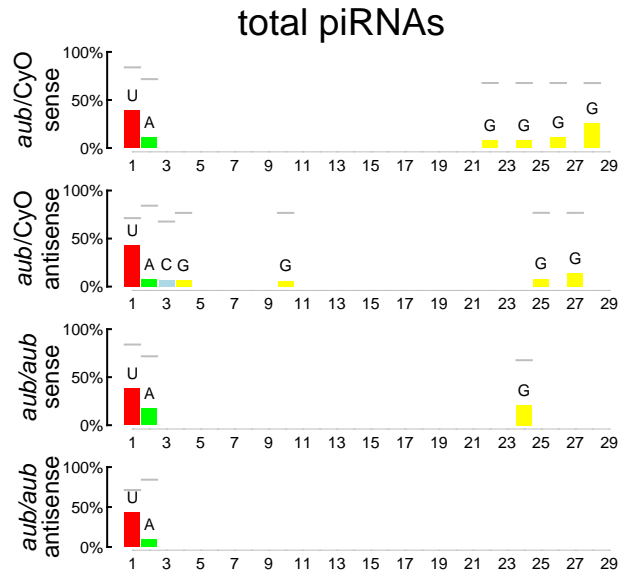
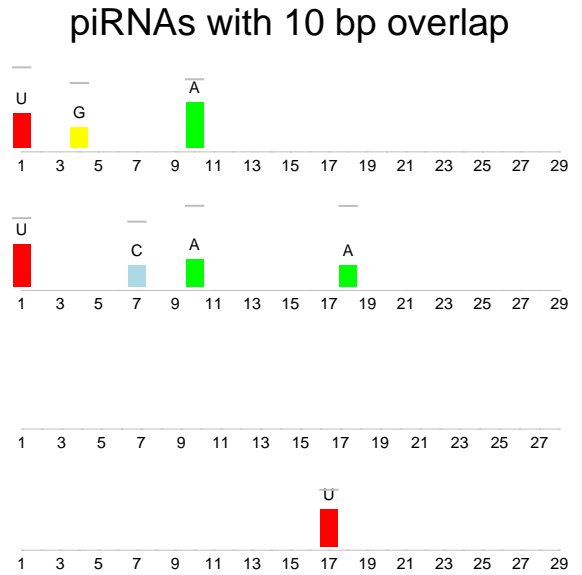
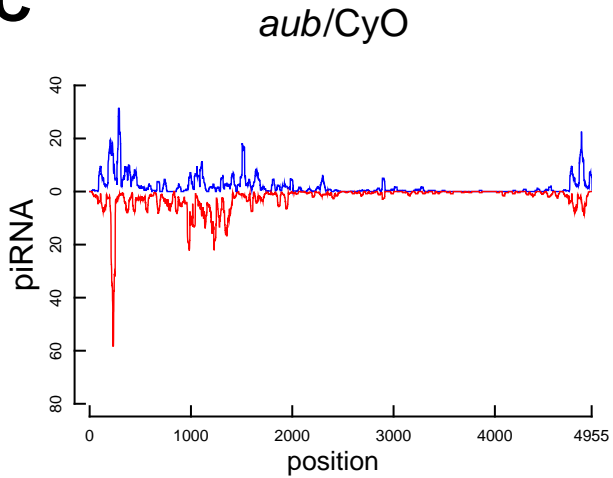
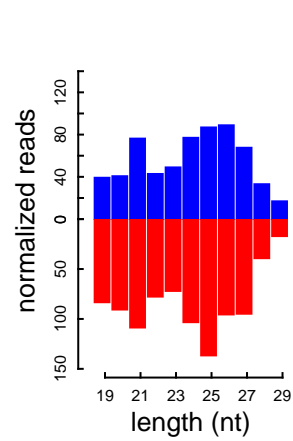
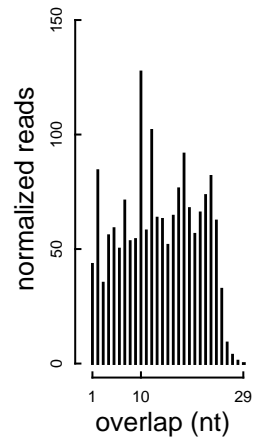
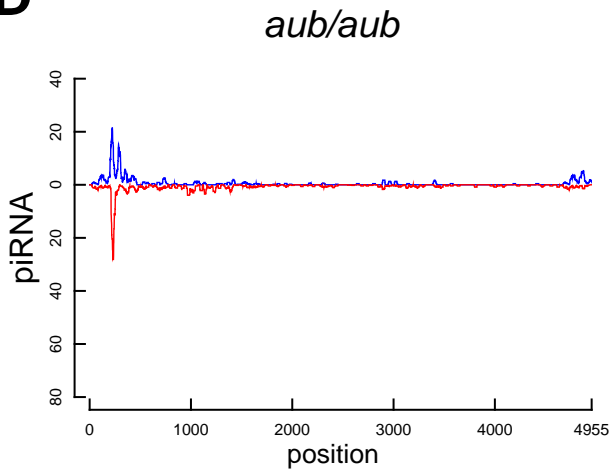
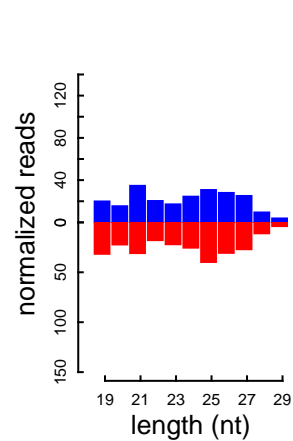
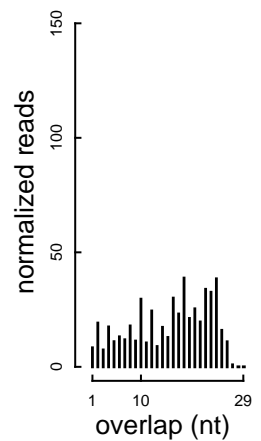
H



gypsy6

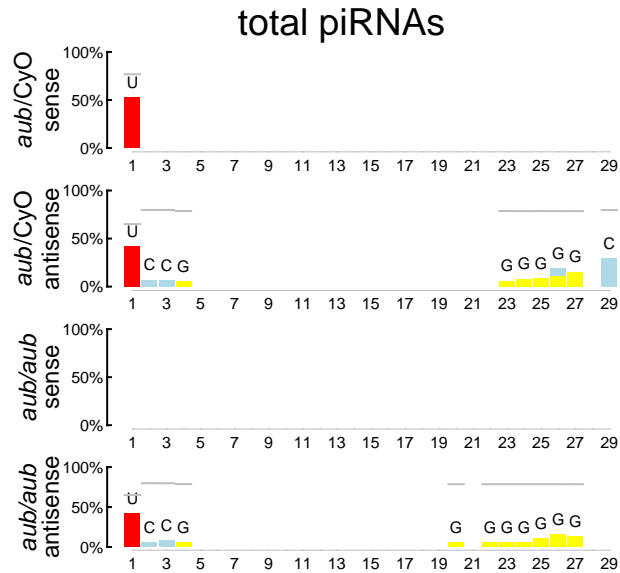
A**B****C****E****G****D****F****H**

gypsy8

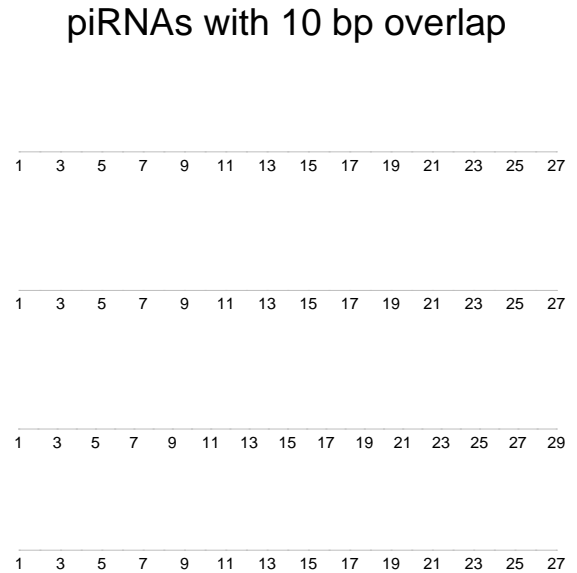
A**B****C****E****G****D****F****H**

gypsy10

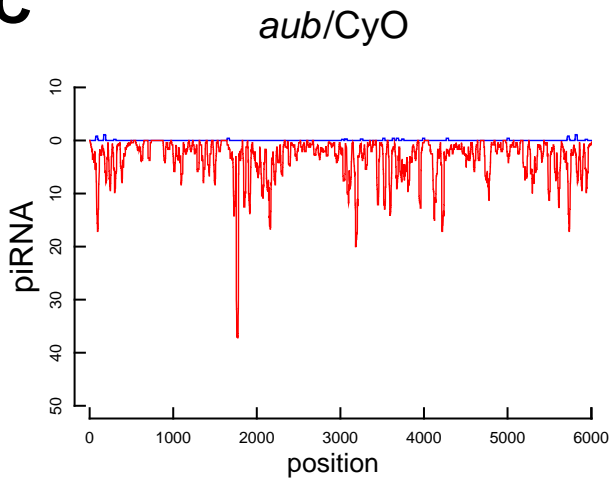
A



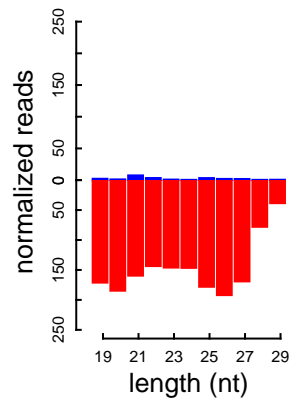
B



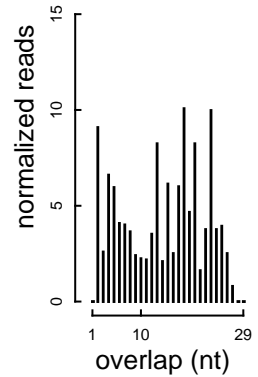
C



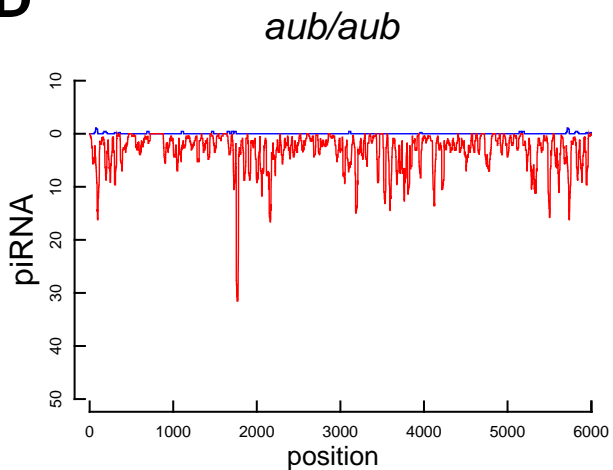
E



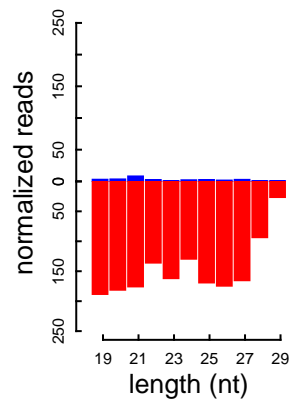
G



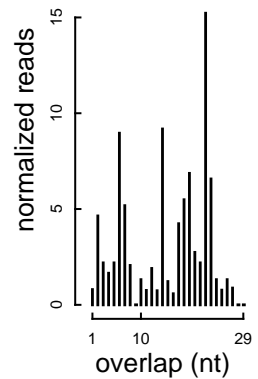
D



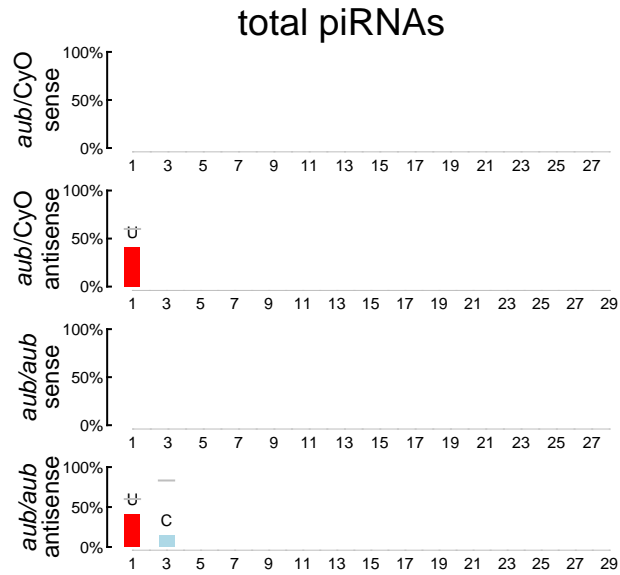
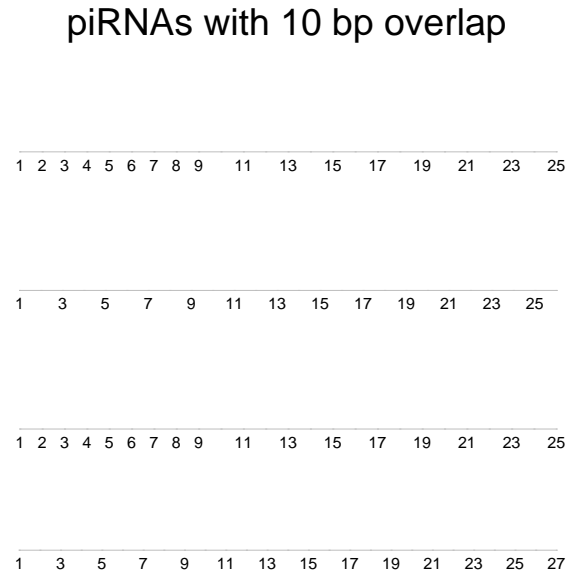
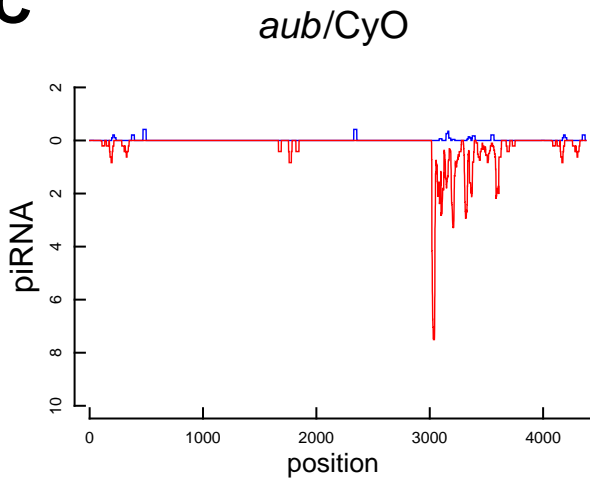
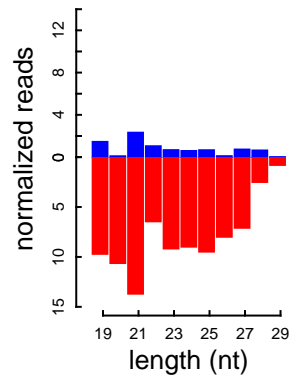
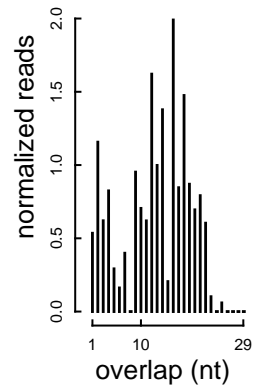
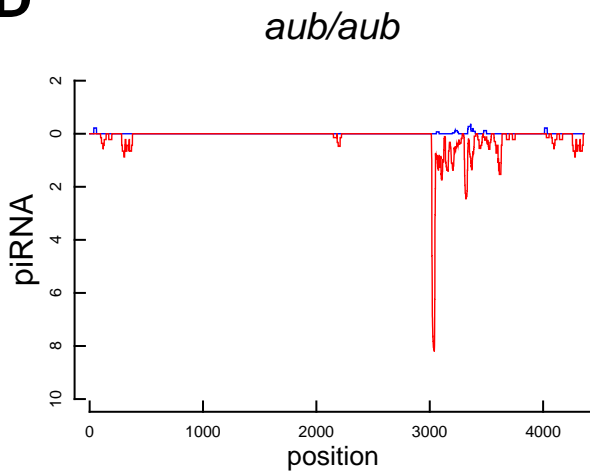
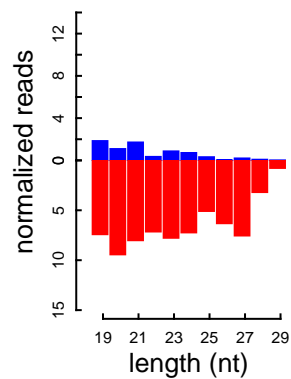
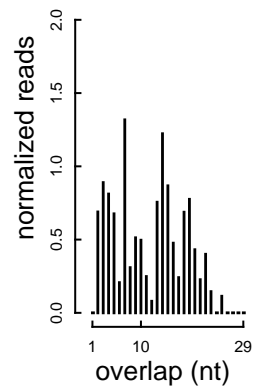
F



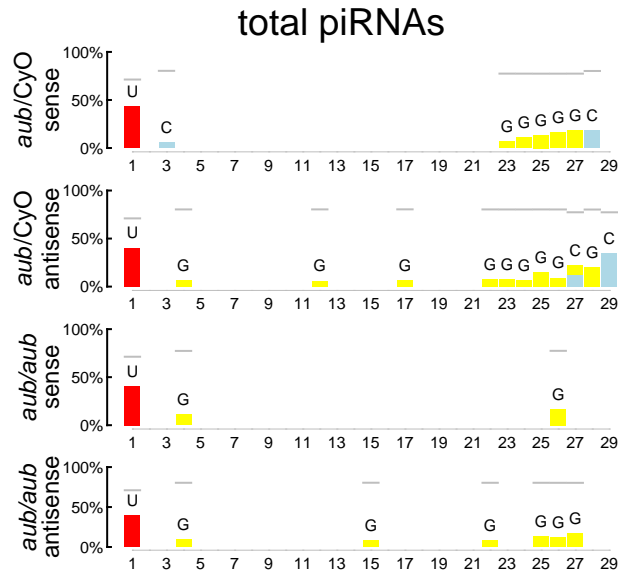
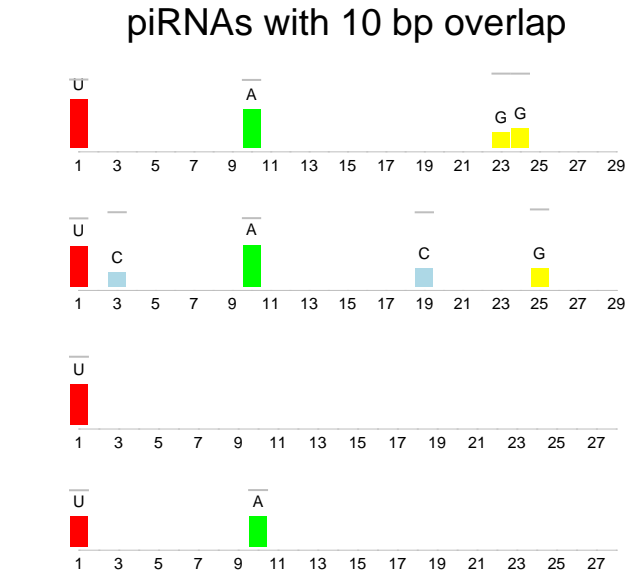
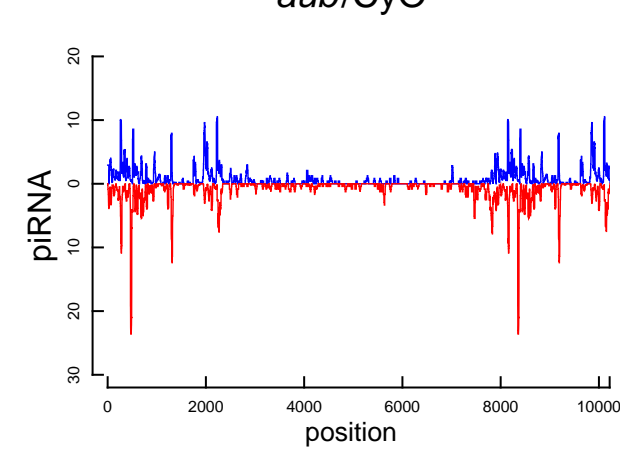
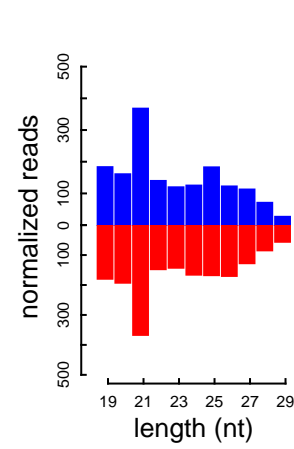
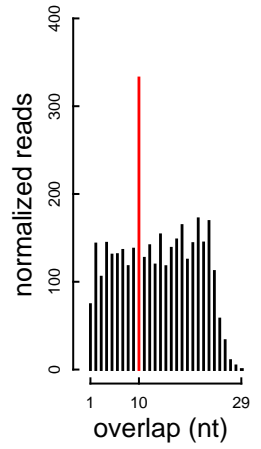
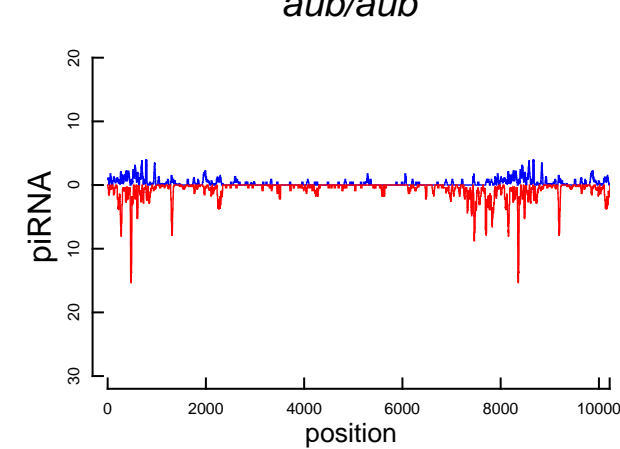
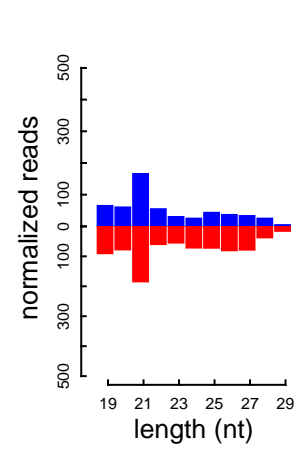
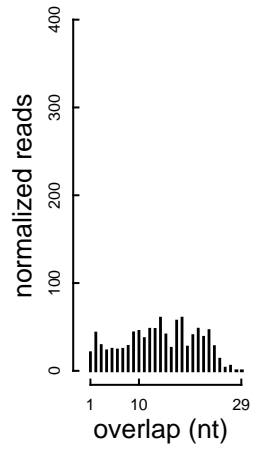
H



gypsy11

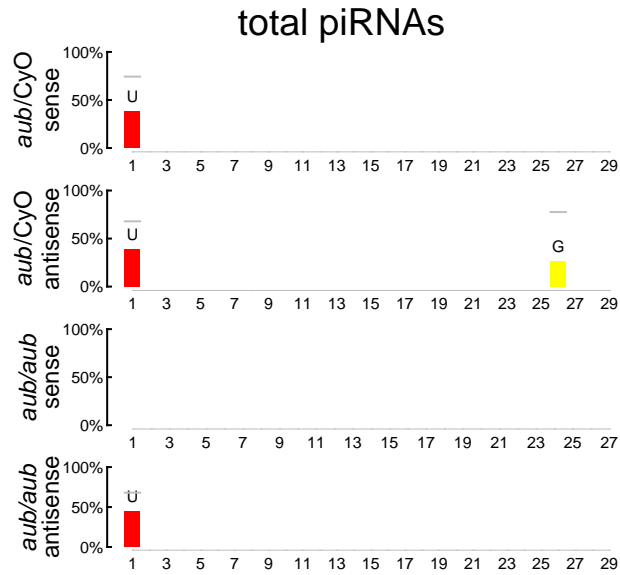
A**B****C****E****G****D****F****H**

gypsy12

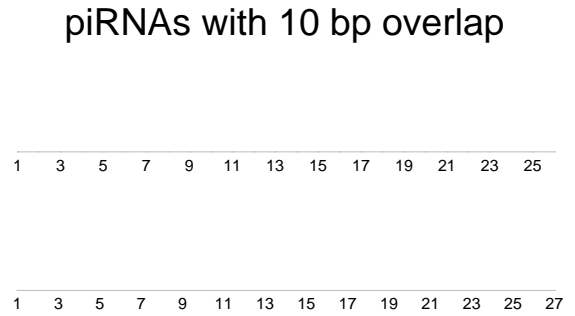
A**B****C****E****G****D****F****H**

Helena

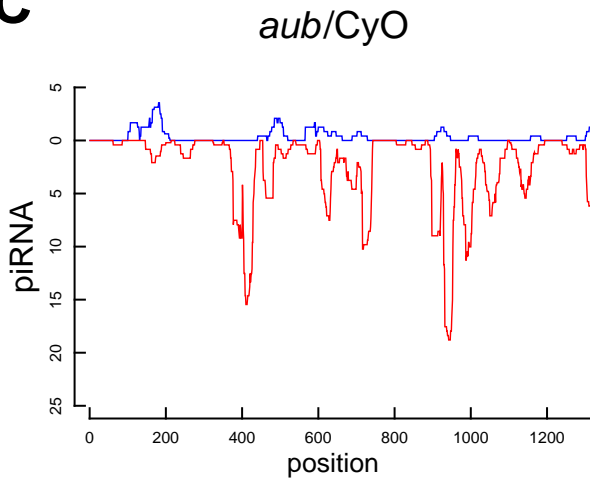
A



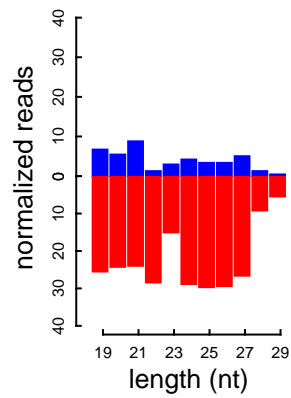
B



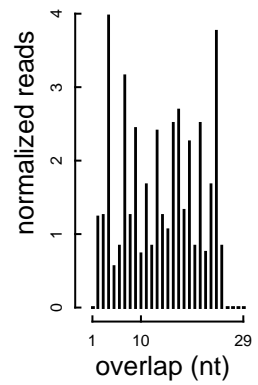
C



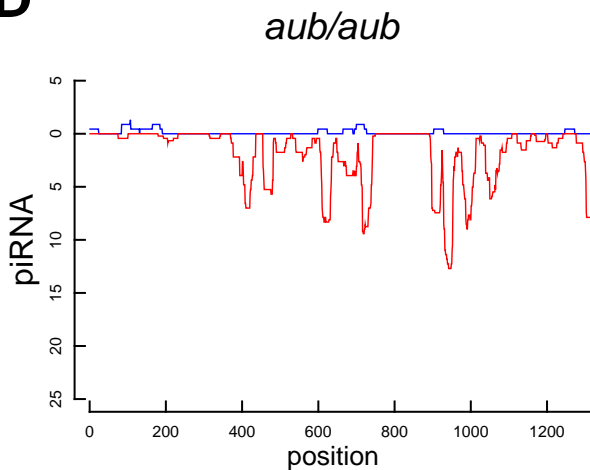
E



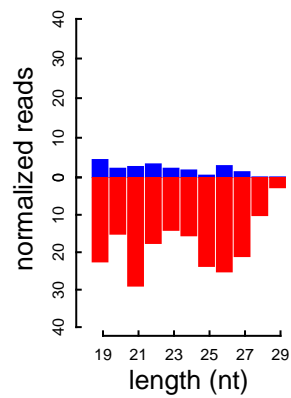
G



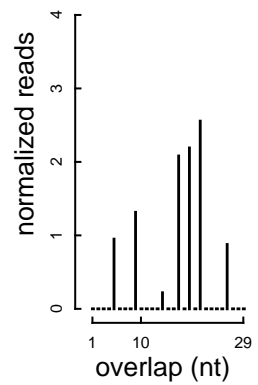
D



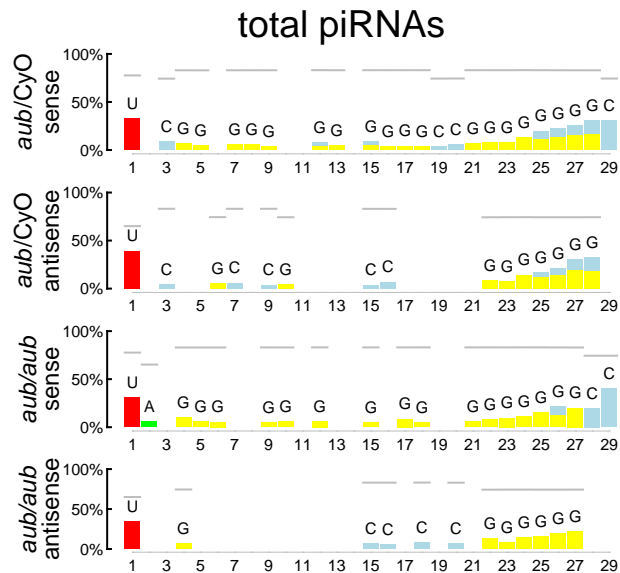
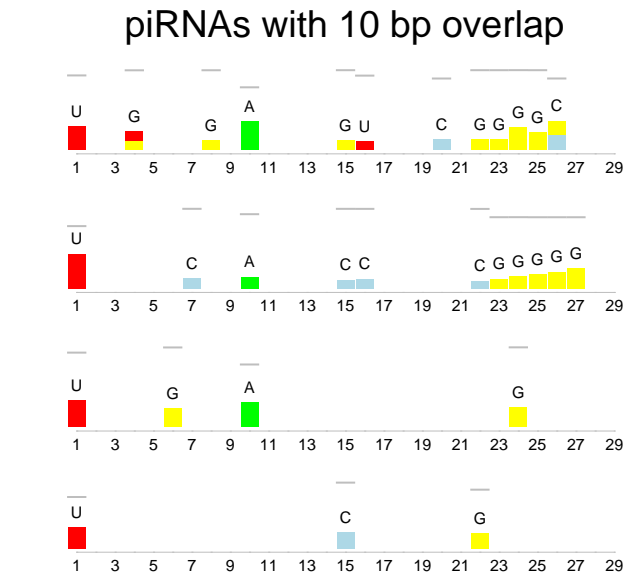
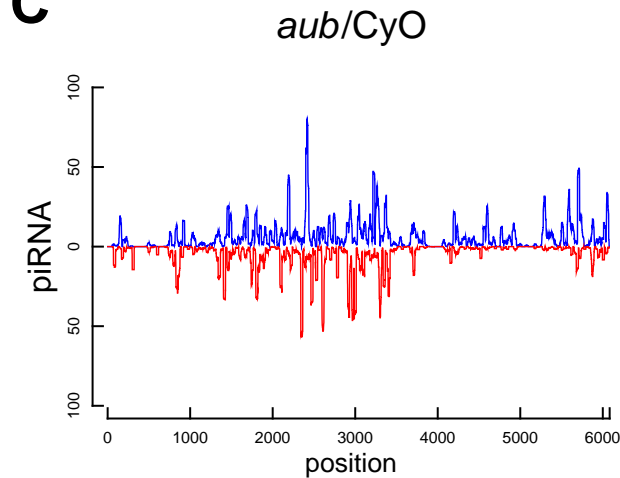
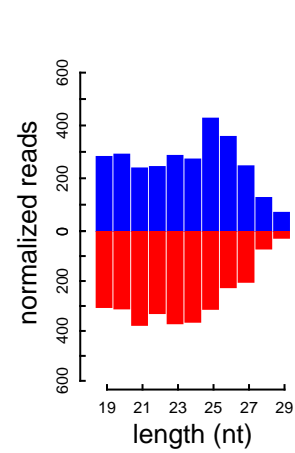
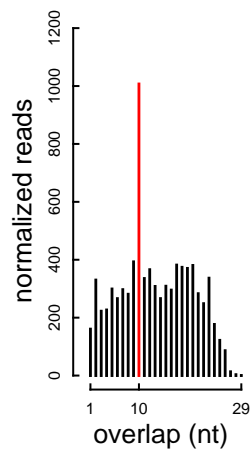
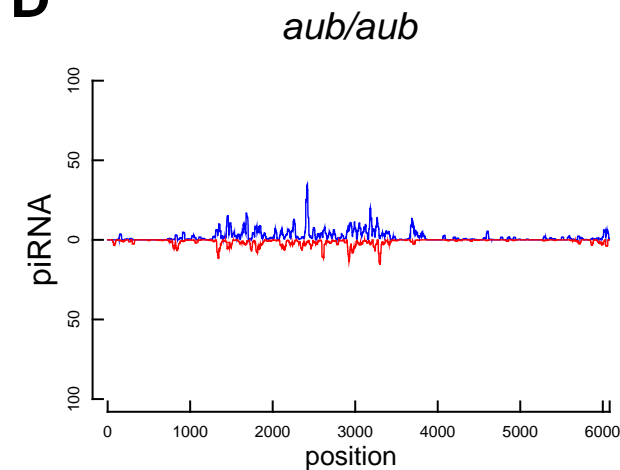
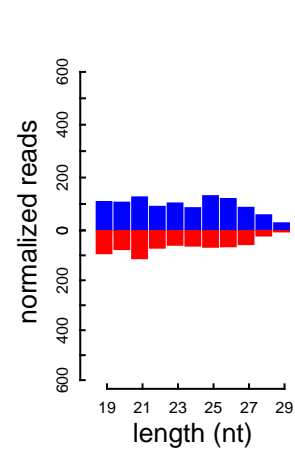
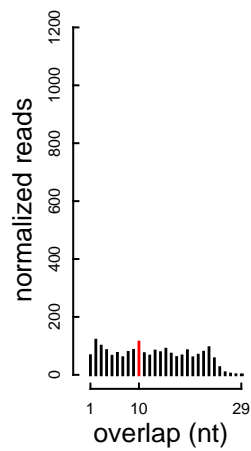
F



H

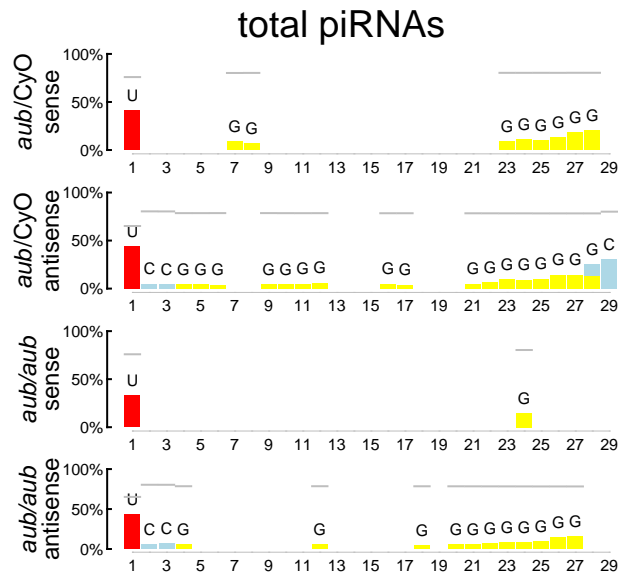


HeT A

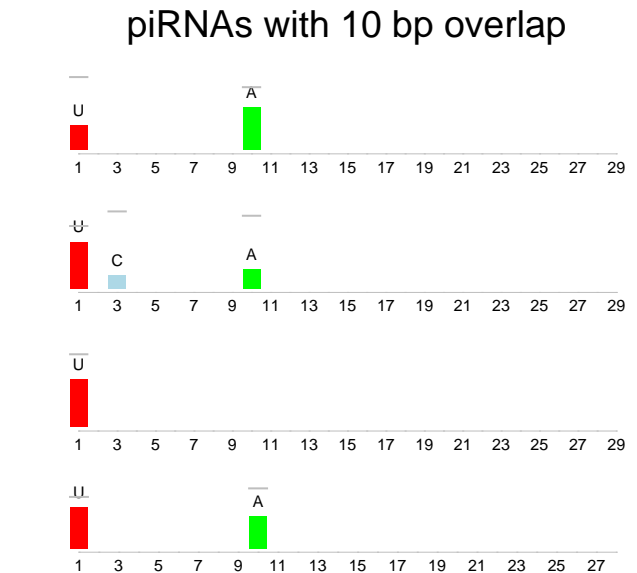
A**B****C****E****G****D****F****H**

HMS Beagle

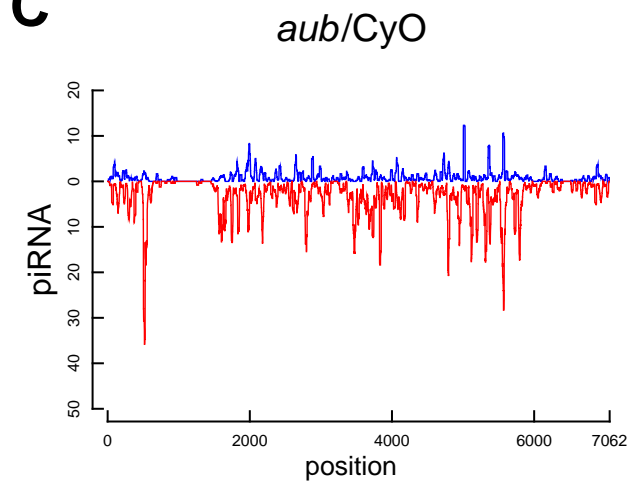
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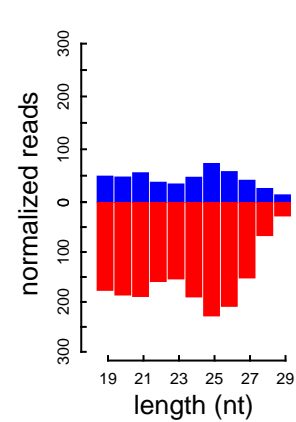
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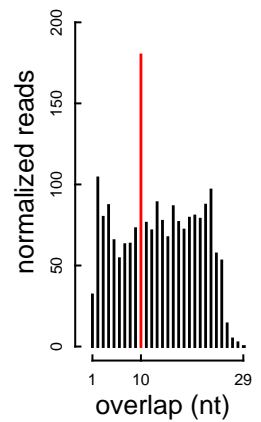
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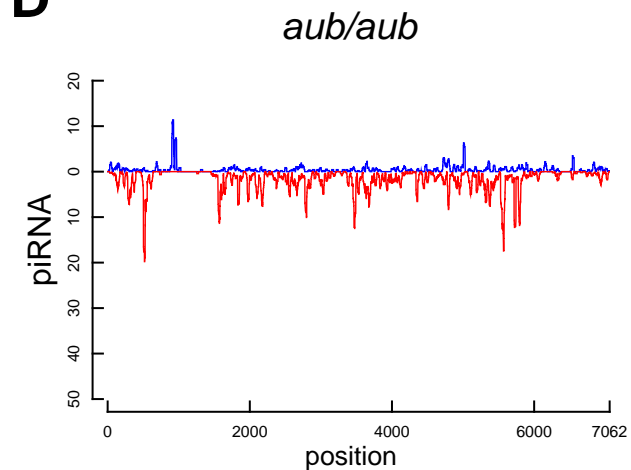
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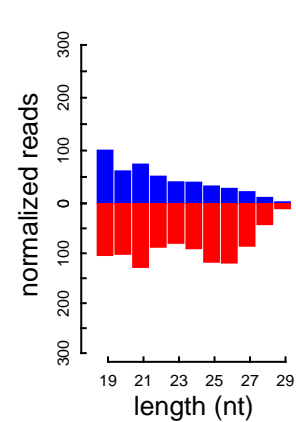
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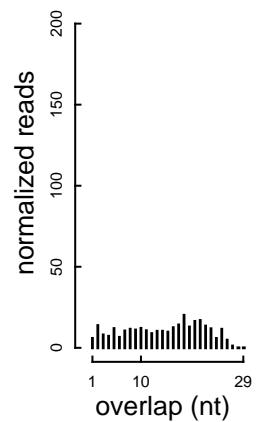
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F

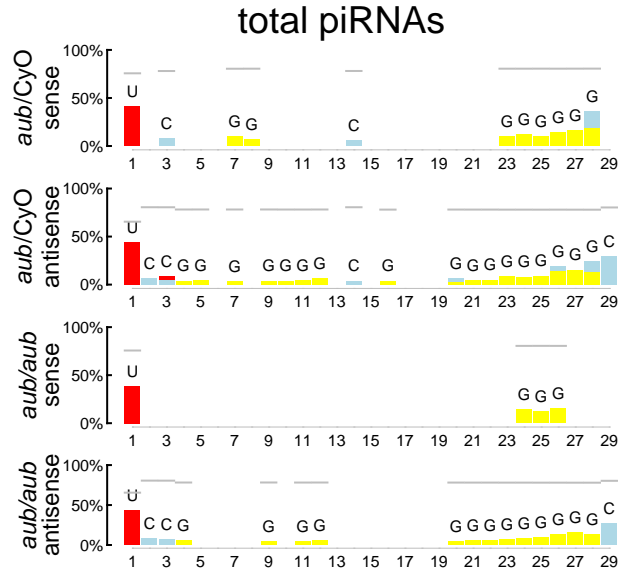


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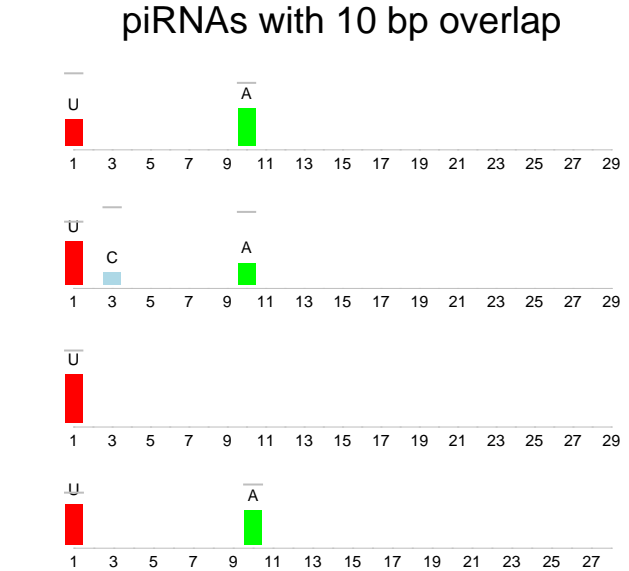


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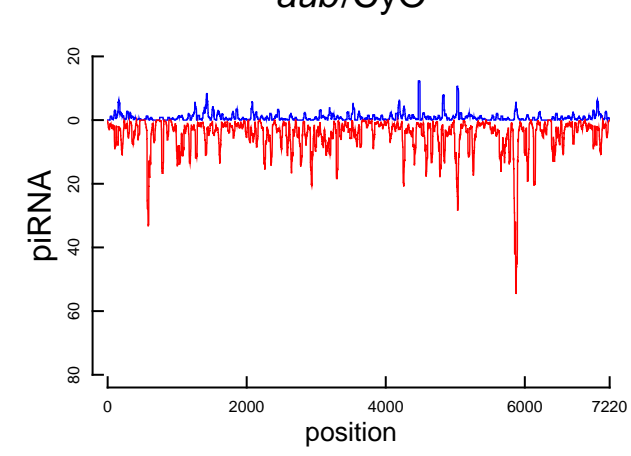
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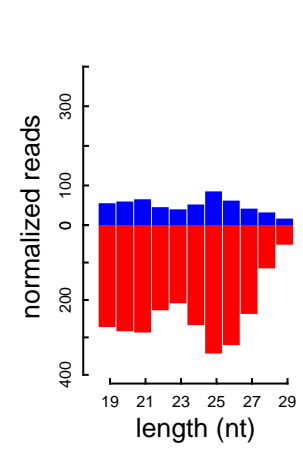
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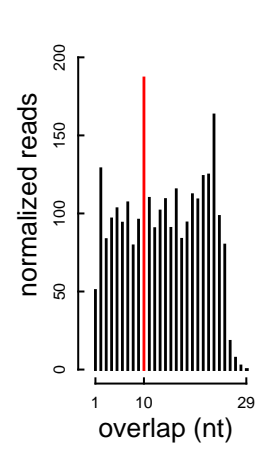
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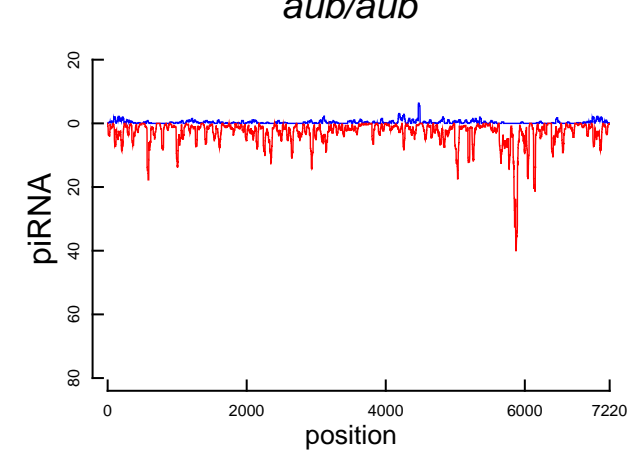
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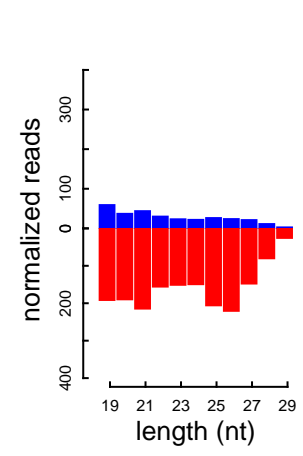
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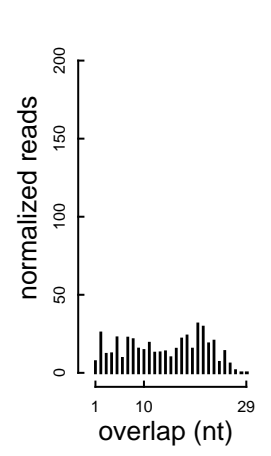
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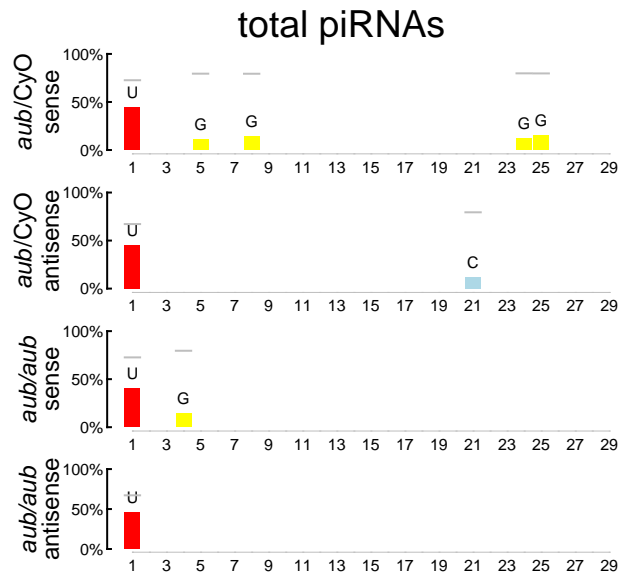
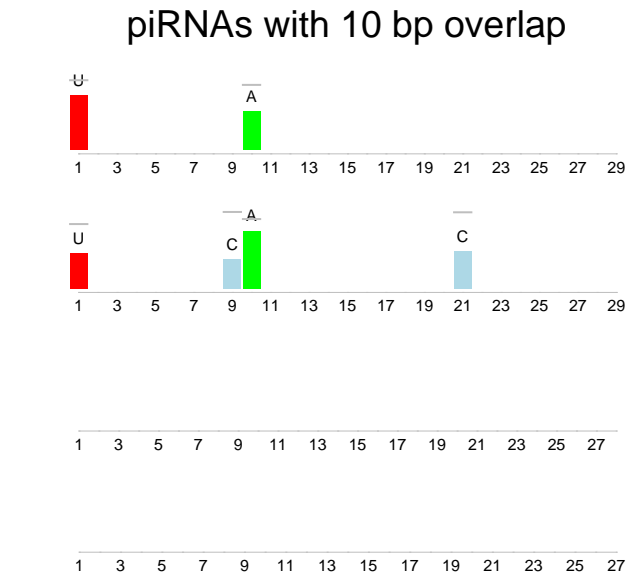
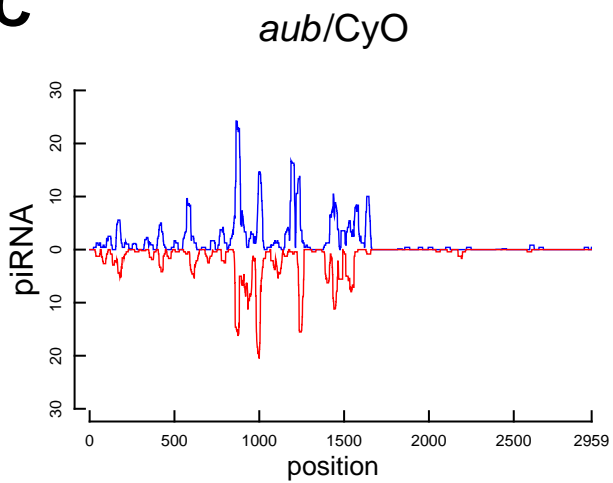
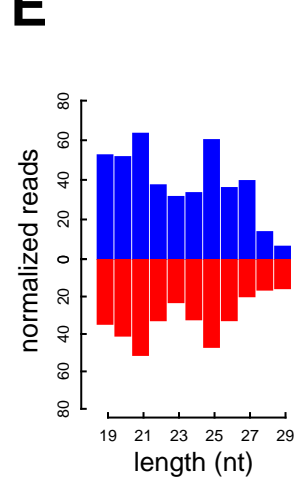
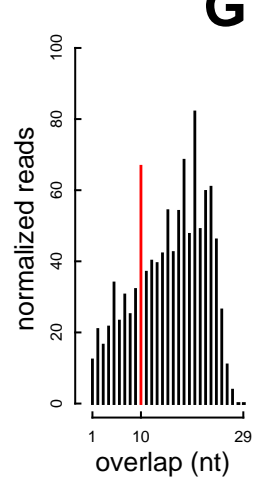
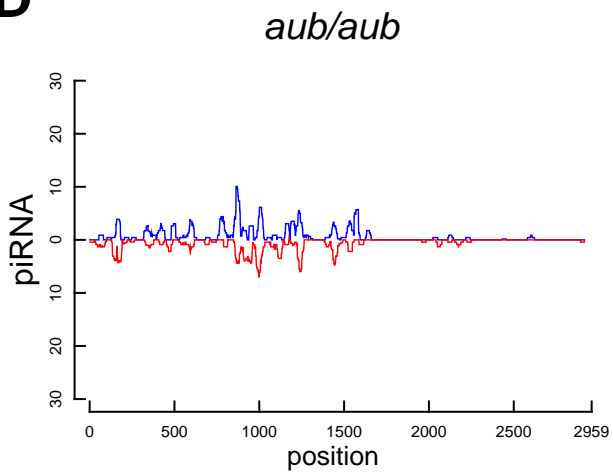
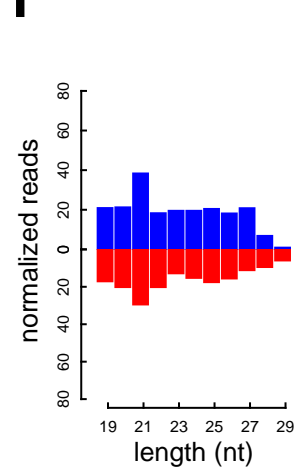
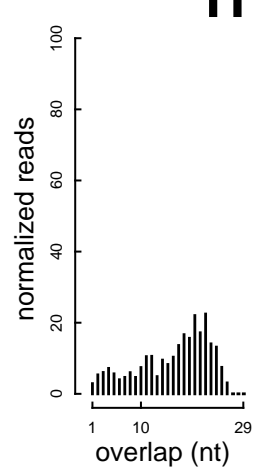
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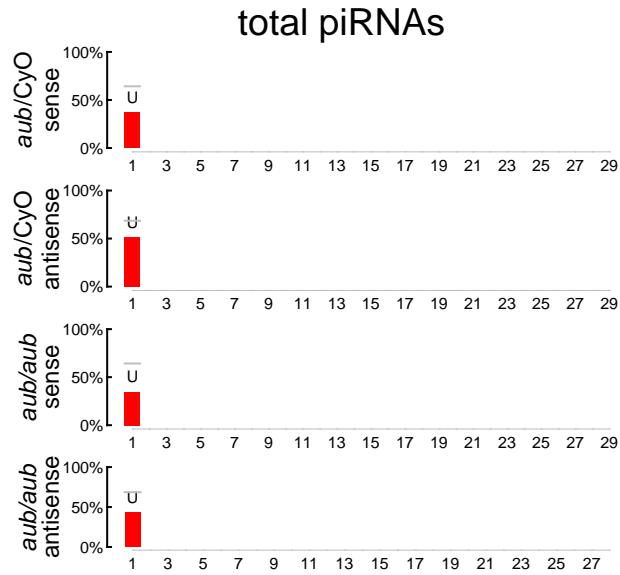
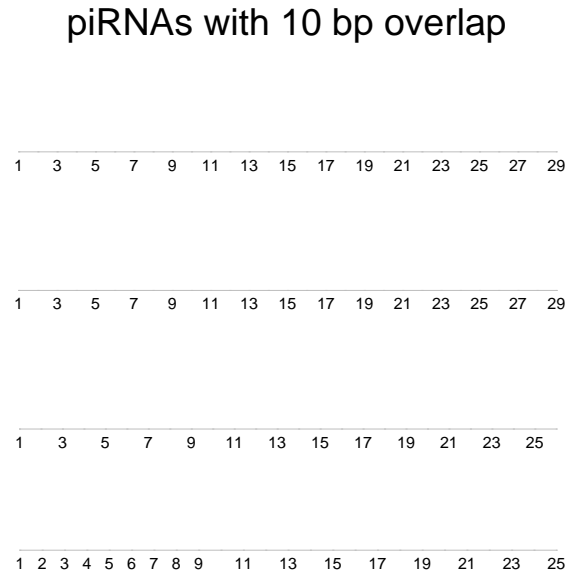
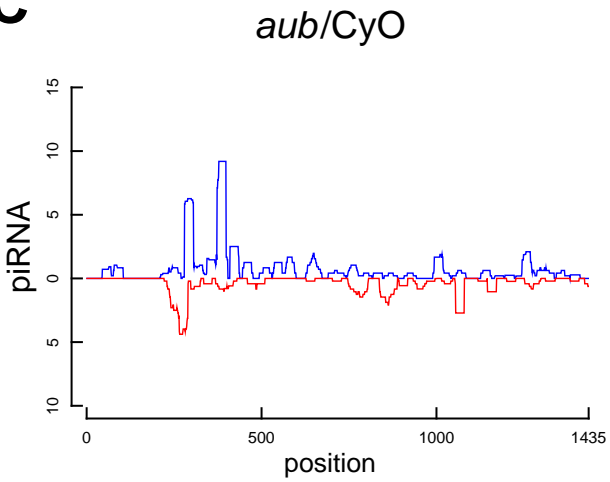
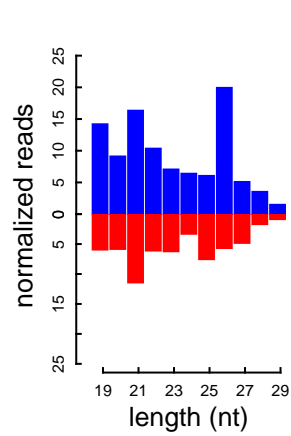
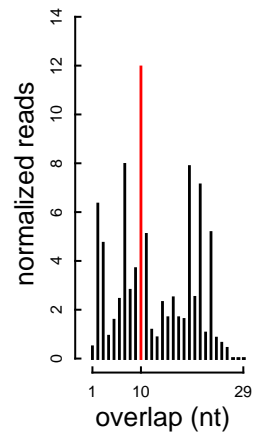
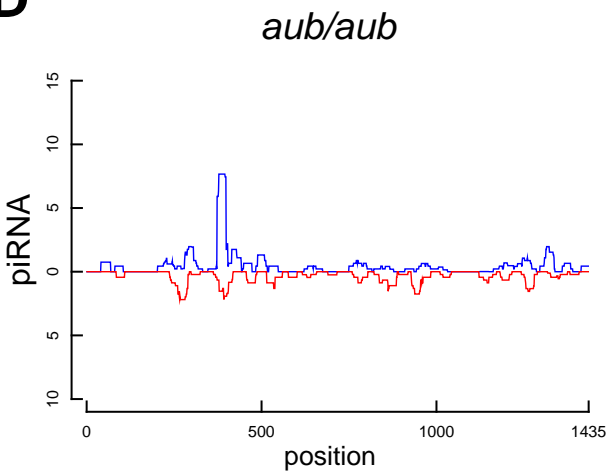
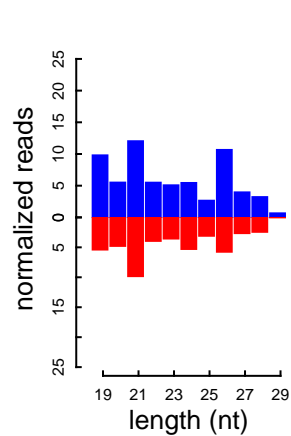
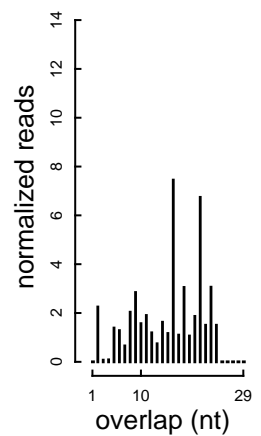
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hobo

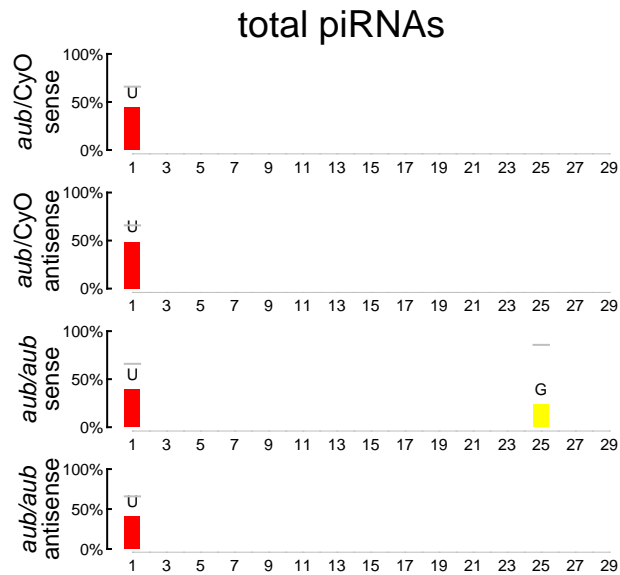
A**B****C****E****G****D****F****H**

hopper

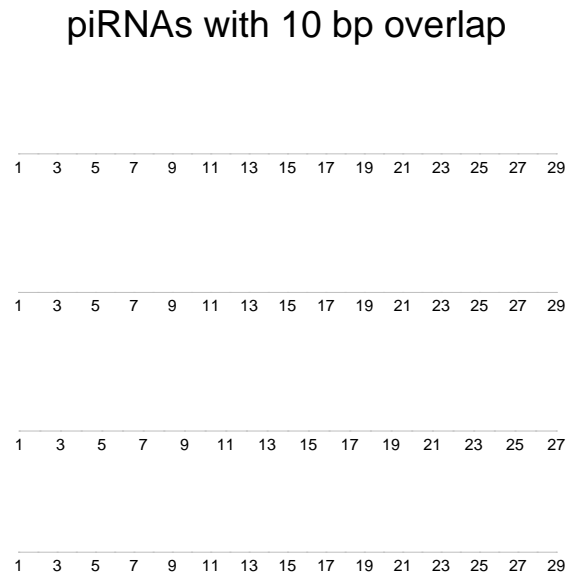
A**B****C****E****G****D****F****H**

hopper2

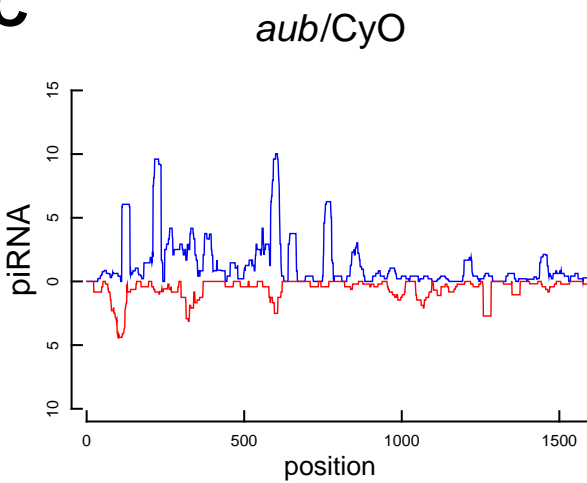
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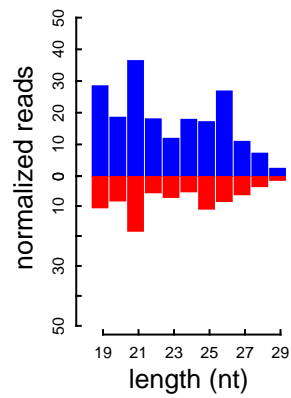
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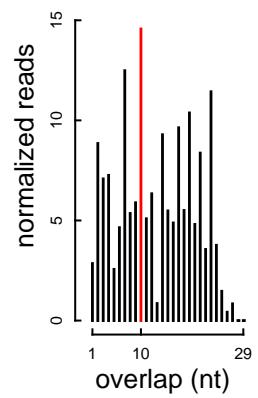
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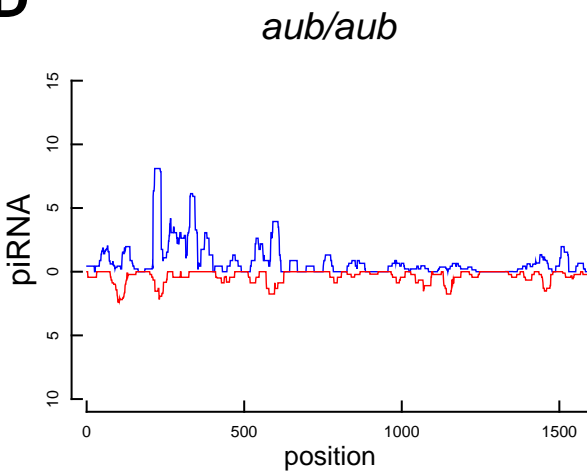
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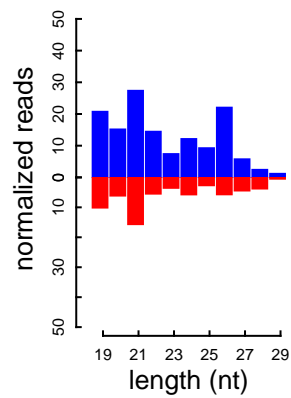
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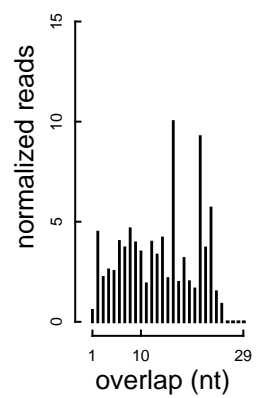
D



F

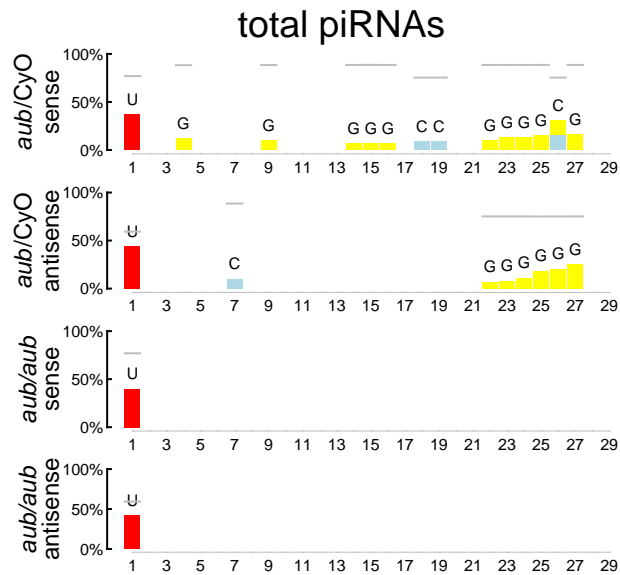


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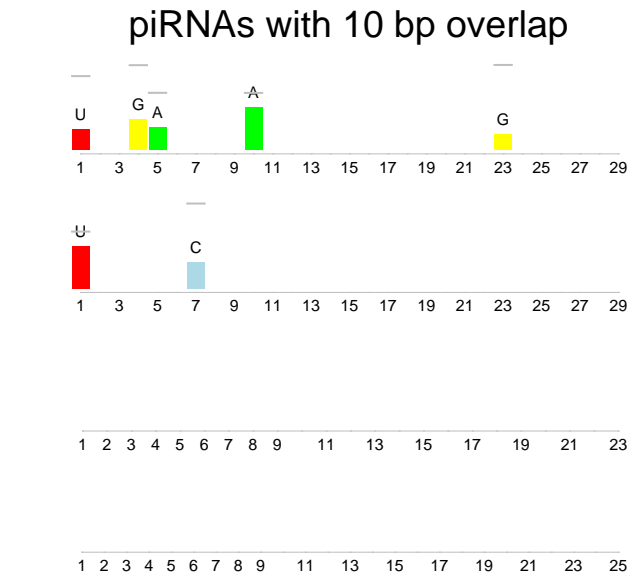


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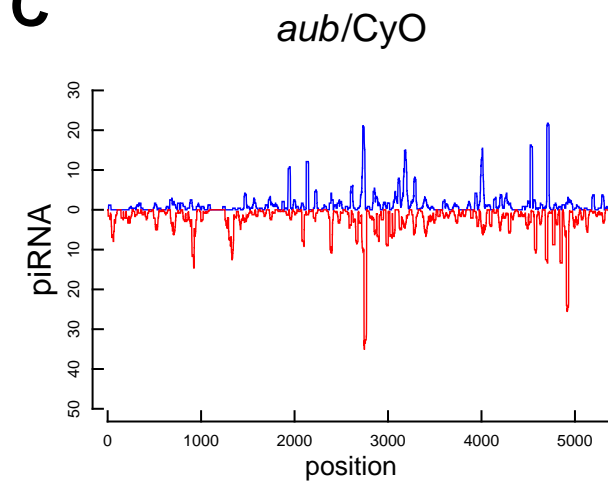
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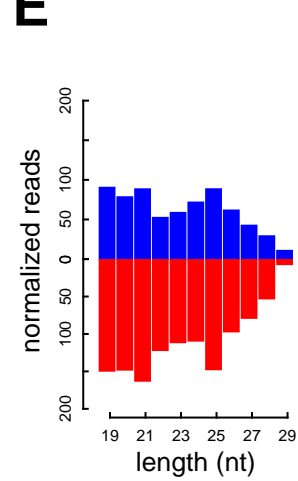
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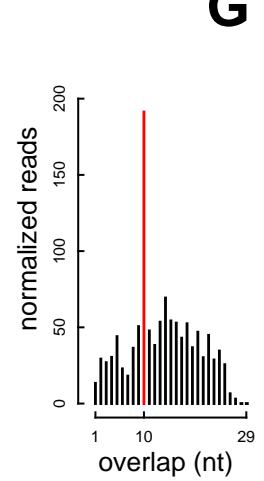
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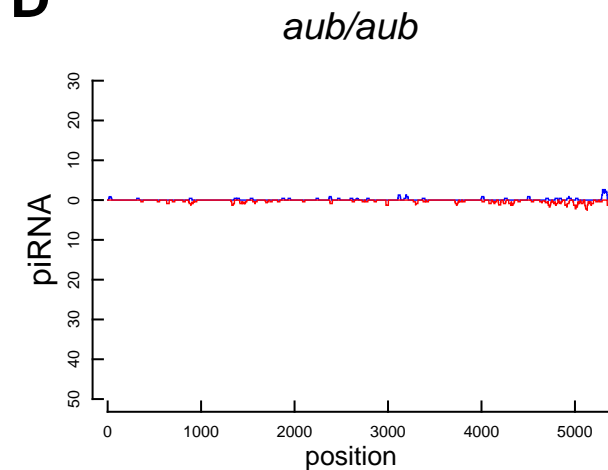
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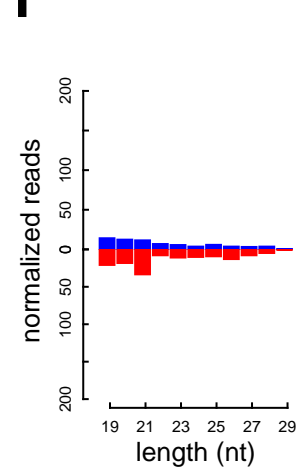
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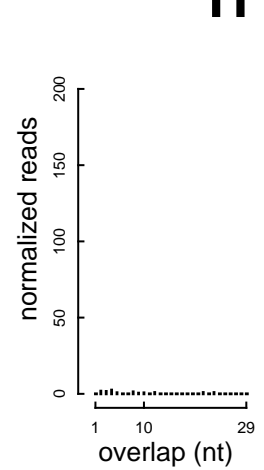
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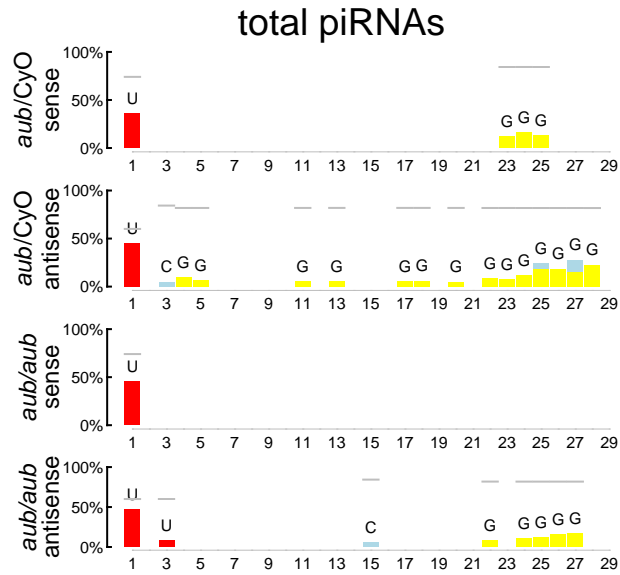


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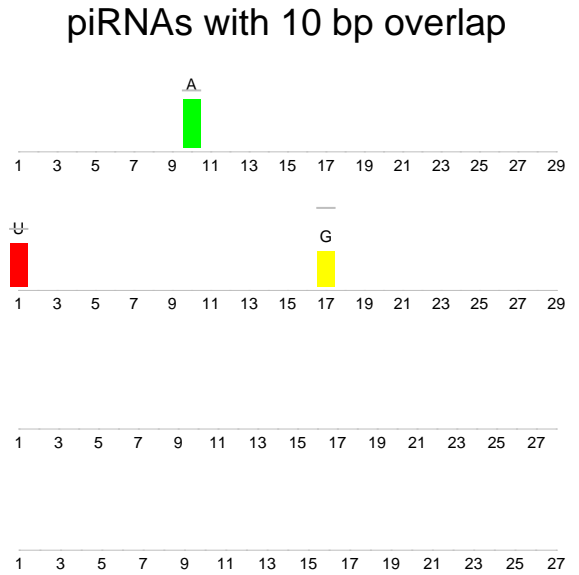


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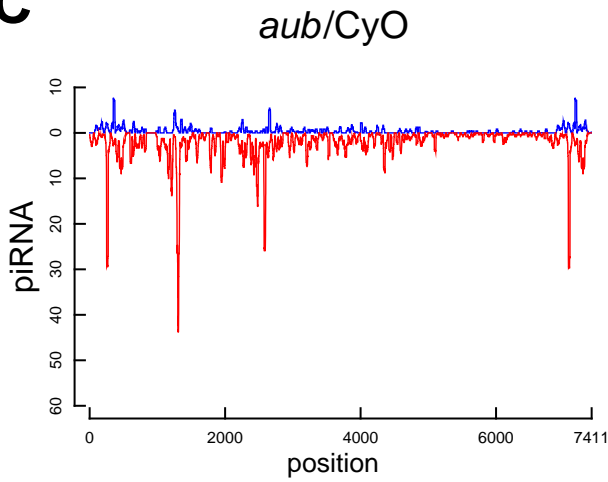
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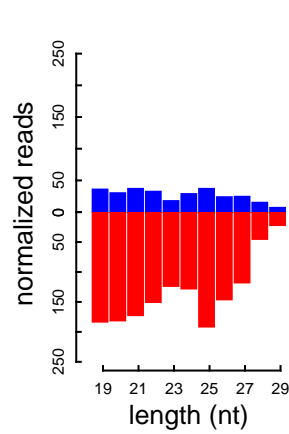
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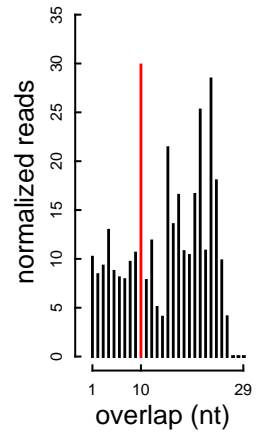
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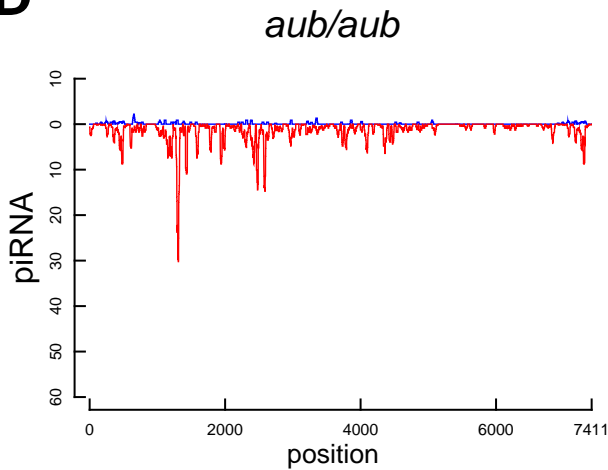
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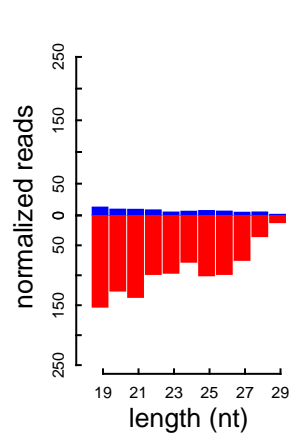
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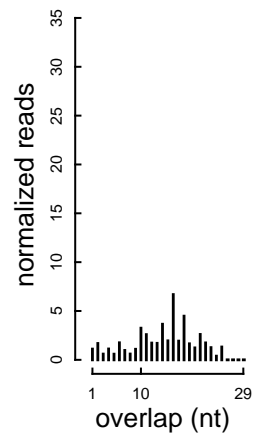
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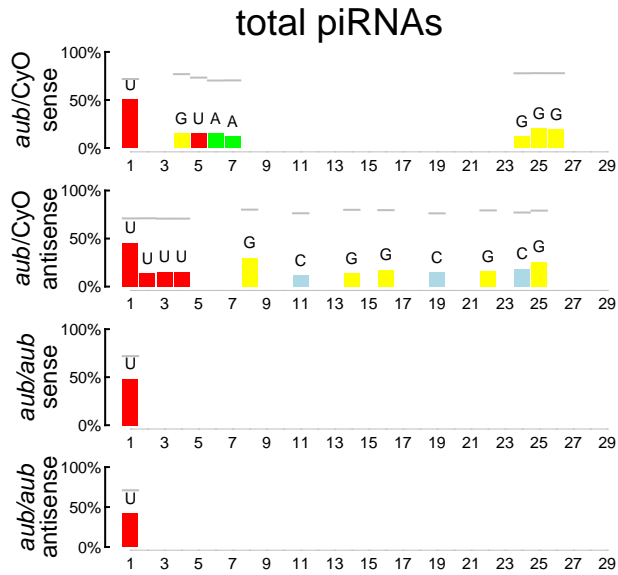
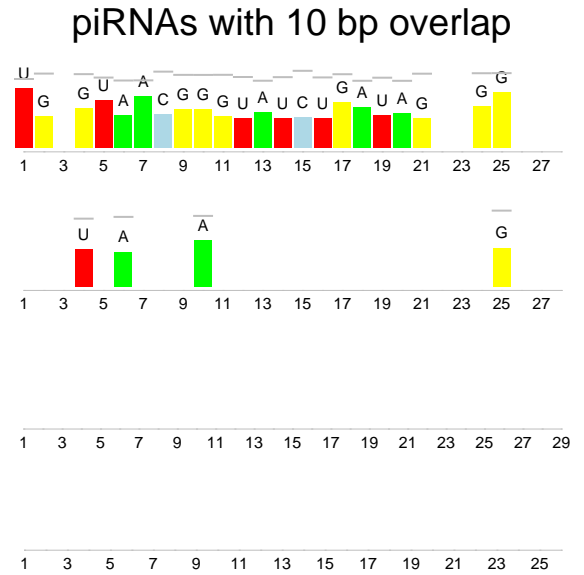
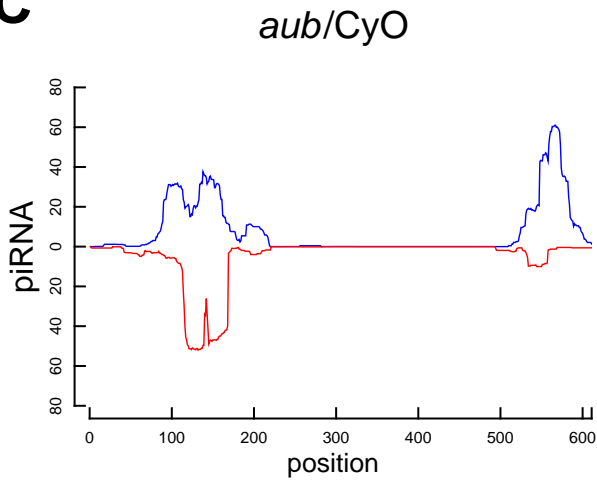
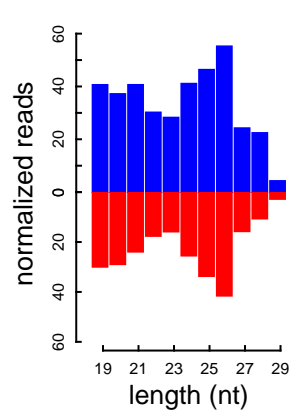
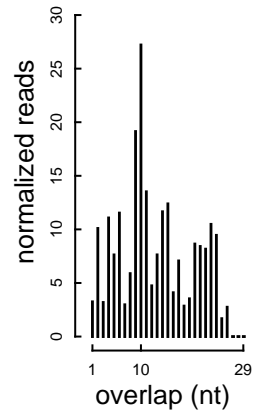
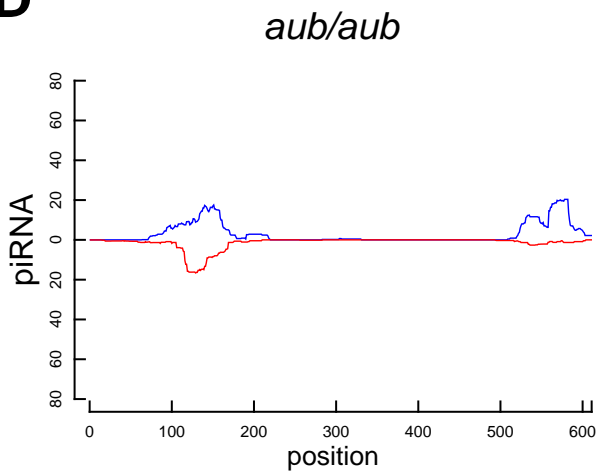
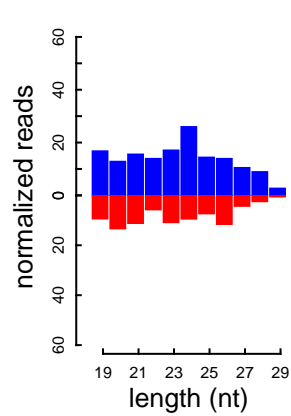
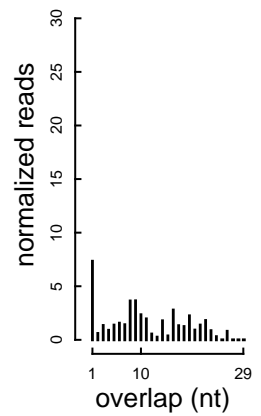
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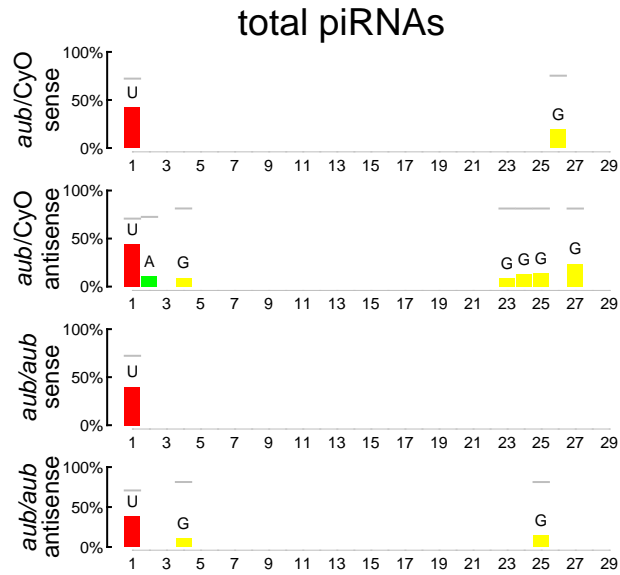
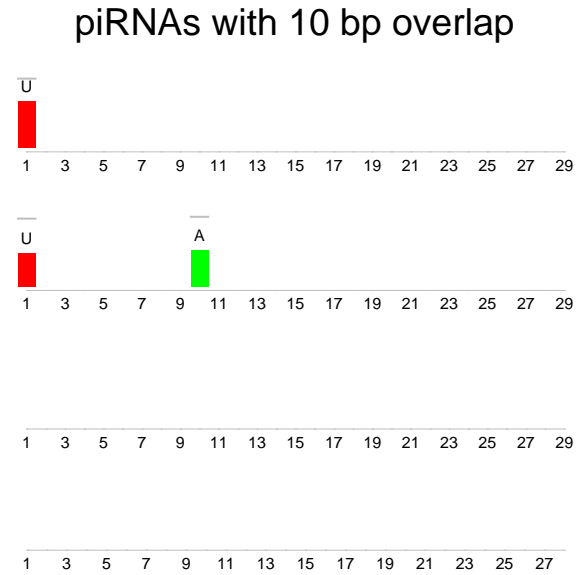
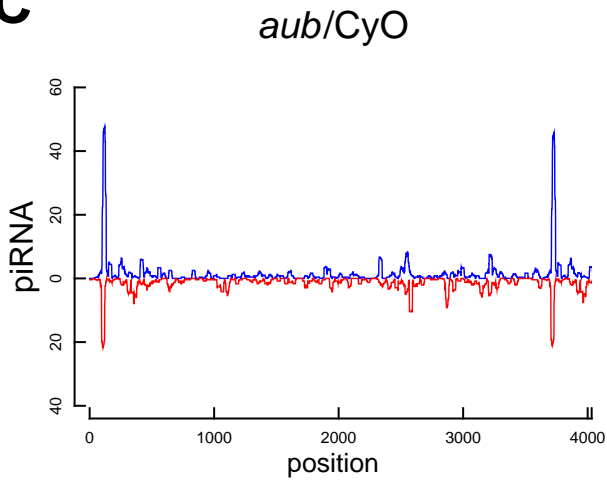
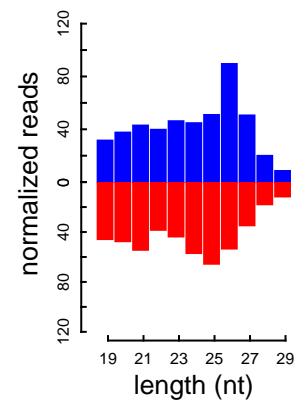
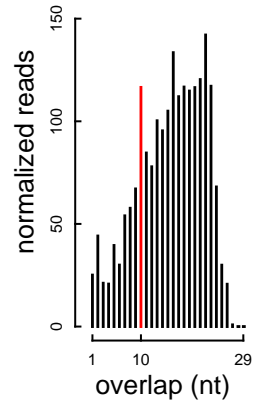
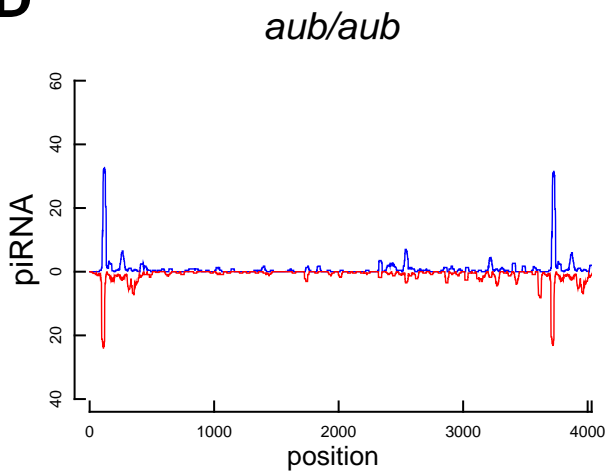
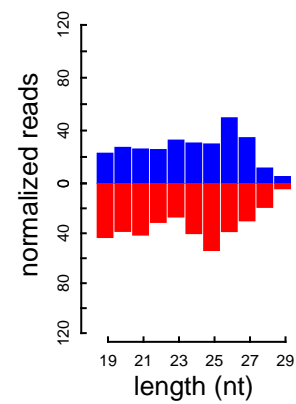
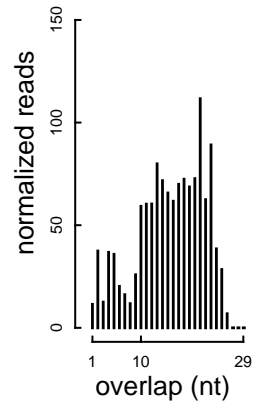
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INE 1

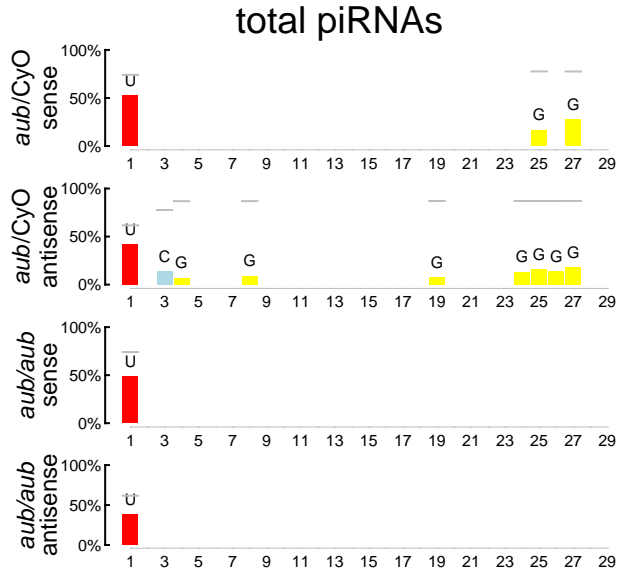
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invader1

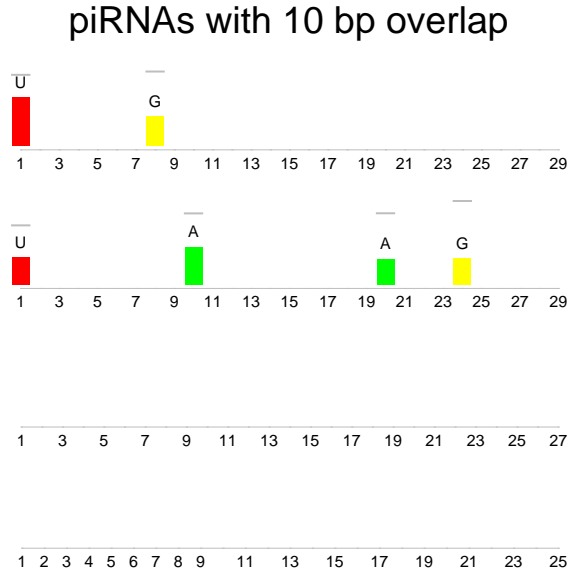
A**B****C****E****G****D****F****H**

invader2

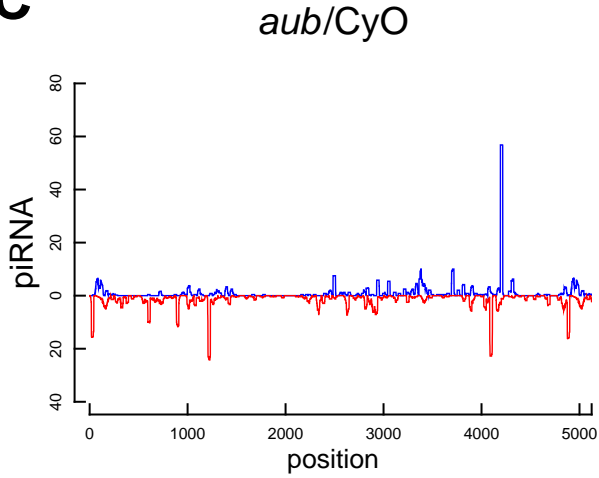
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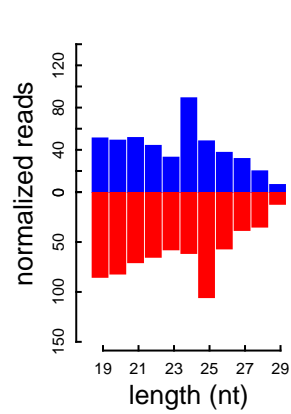
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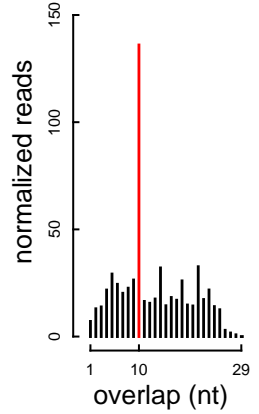
C



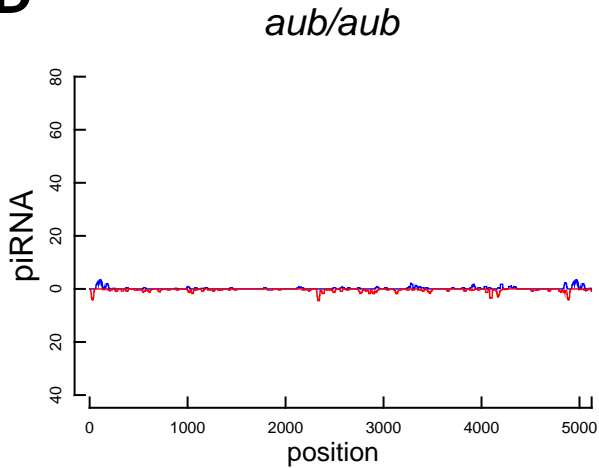
E



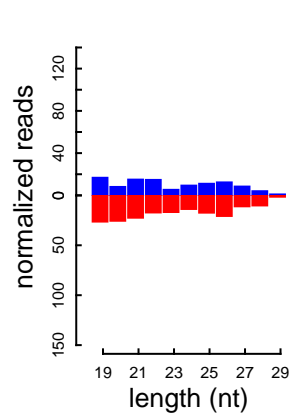
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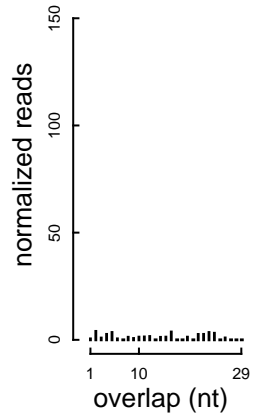
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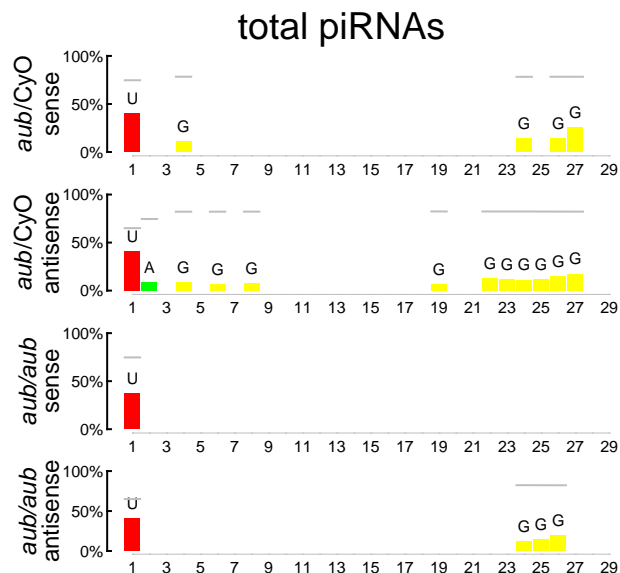
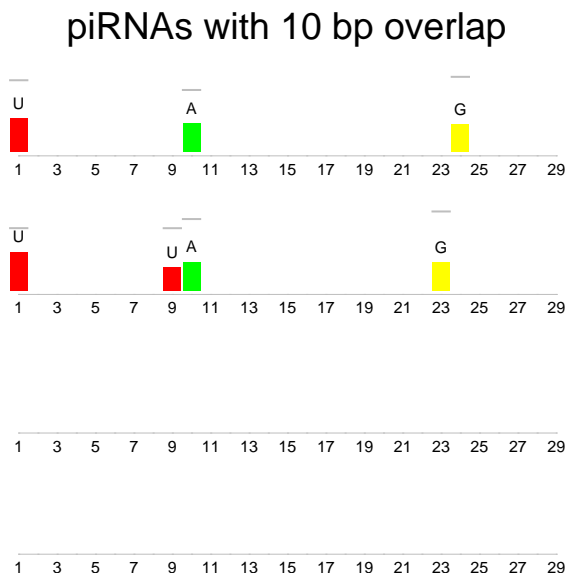
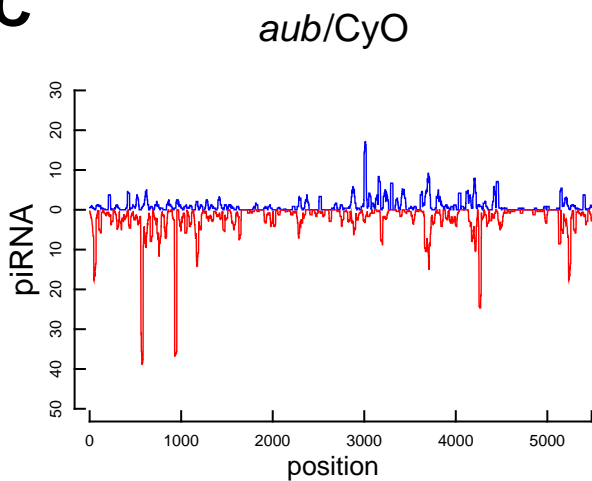
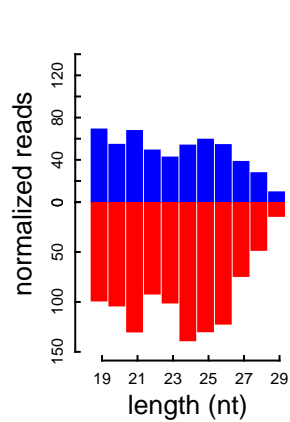
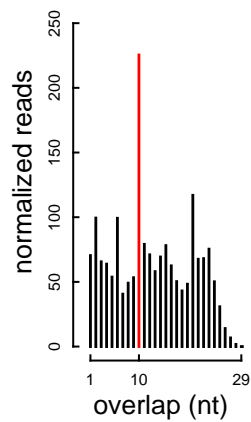
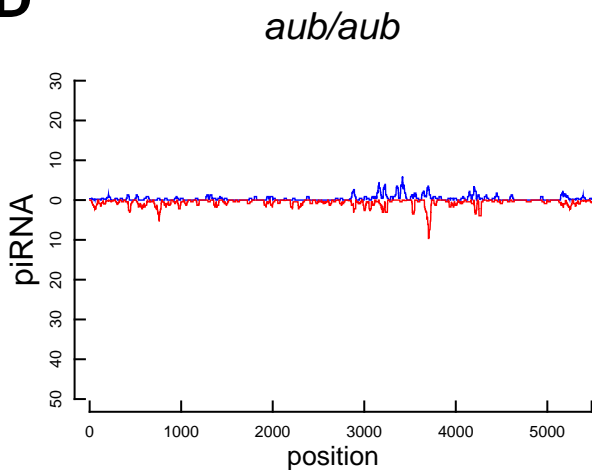
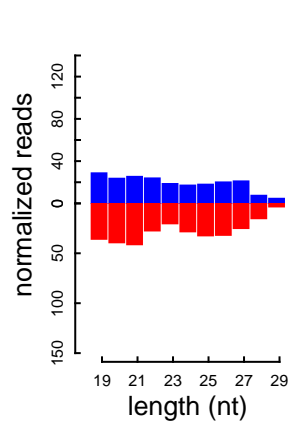
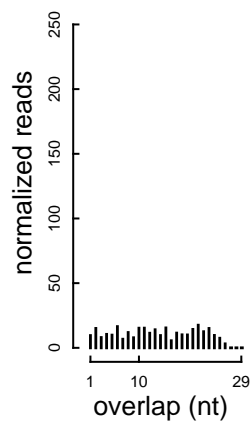
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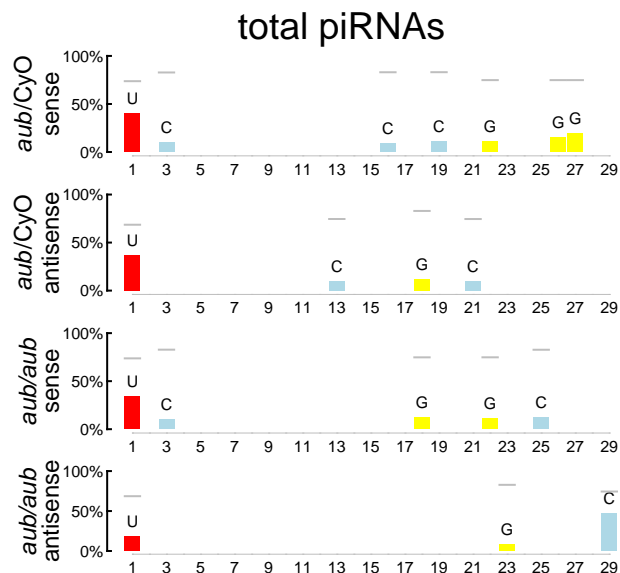
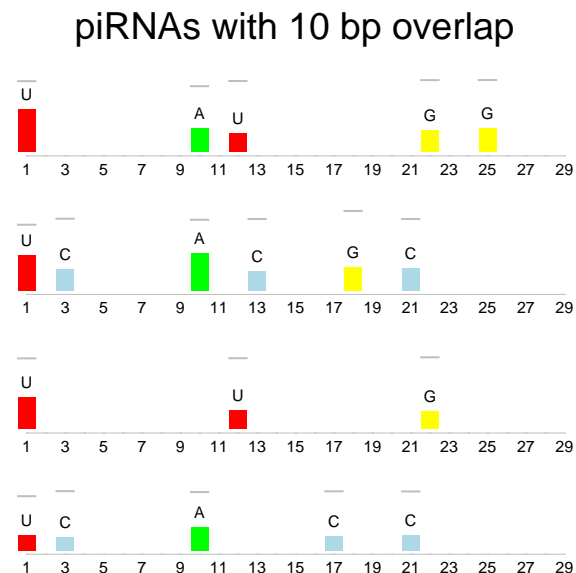
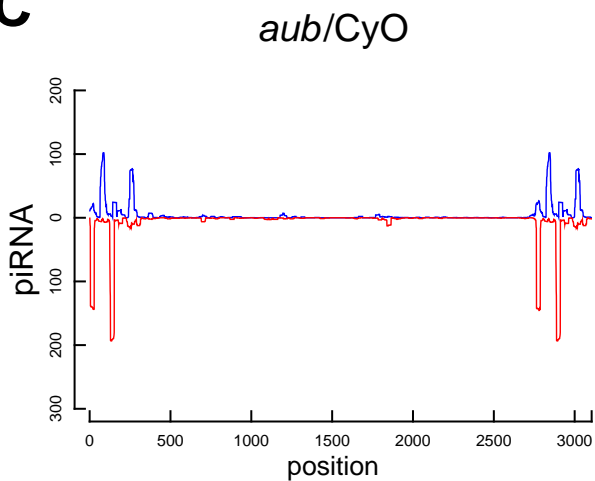
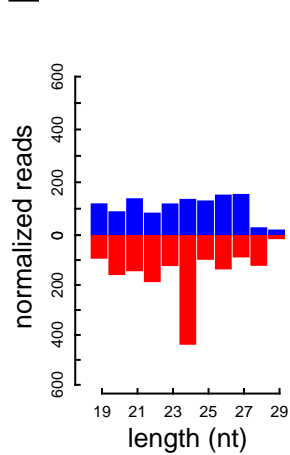
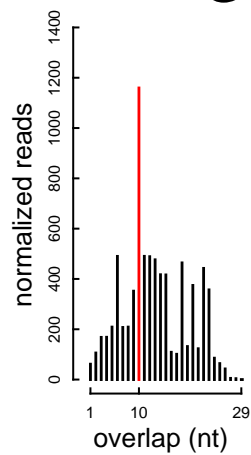
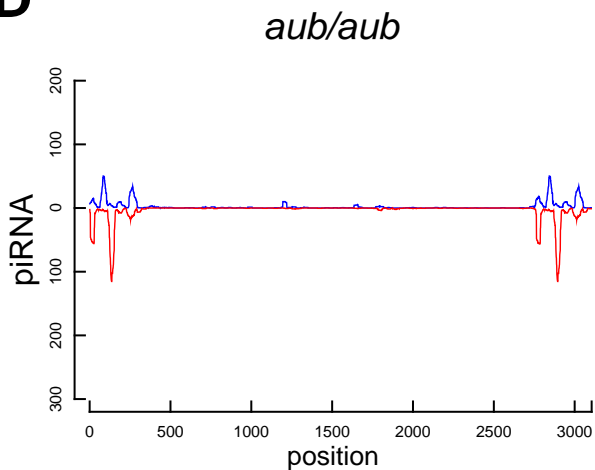
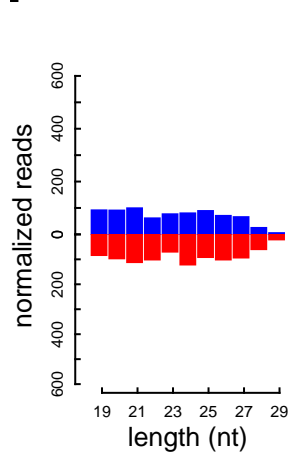
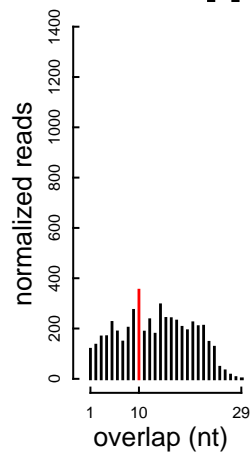
H



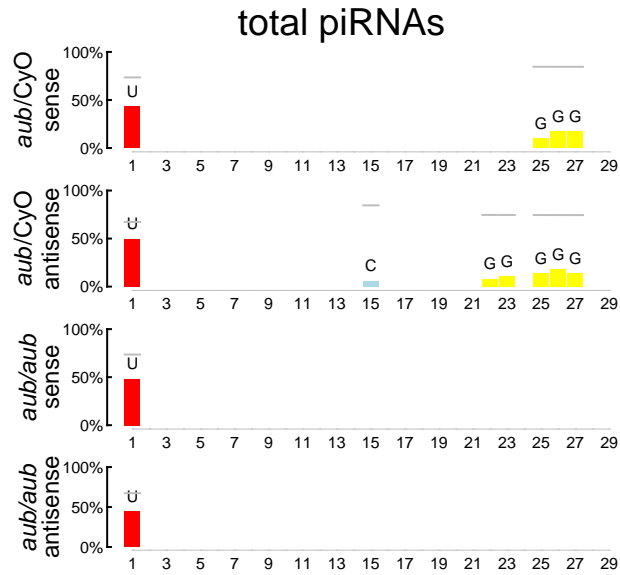
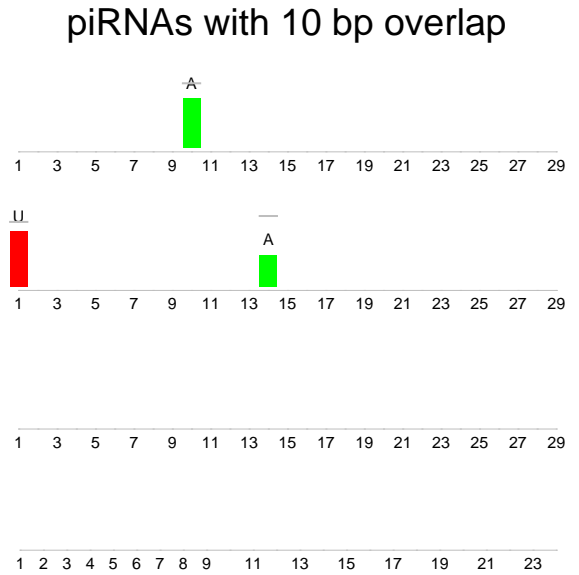
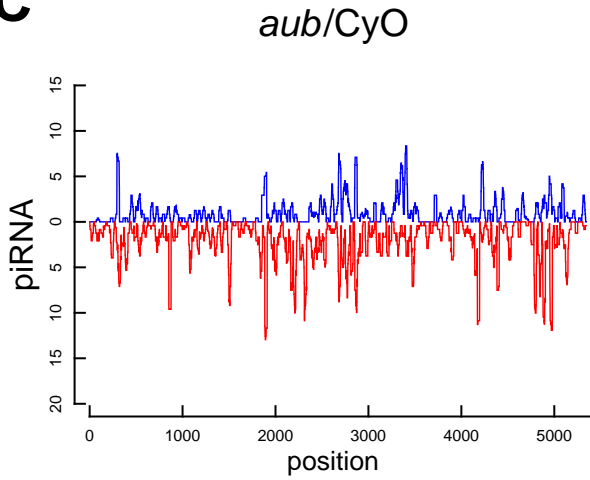
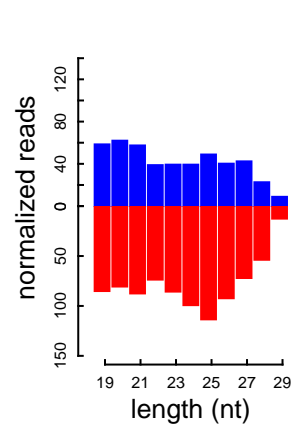
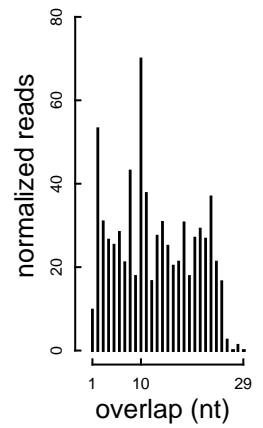
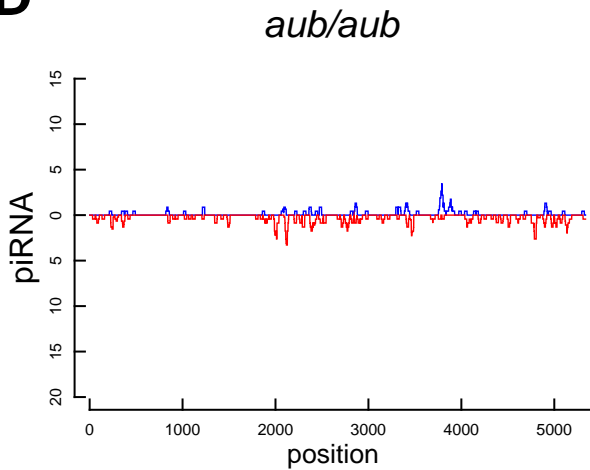
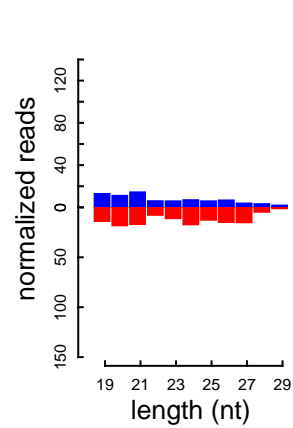
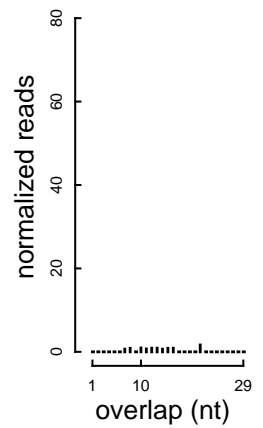
invader3

A**B****C****E****G****D****F****H**

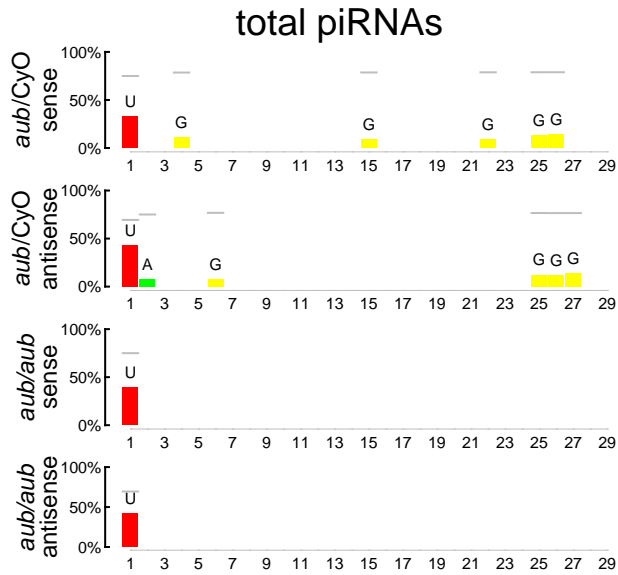
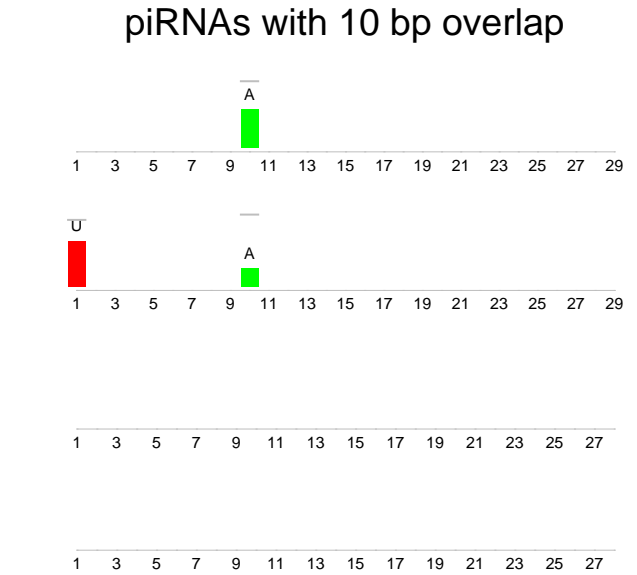
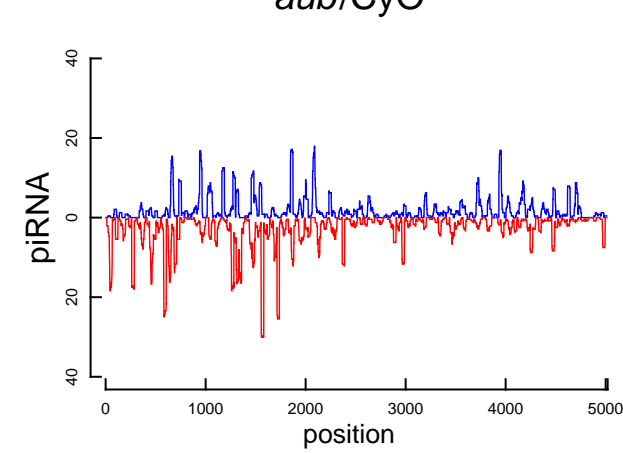
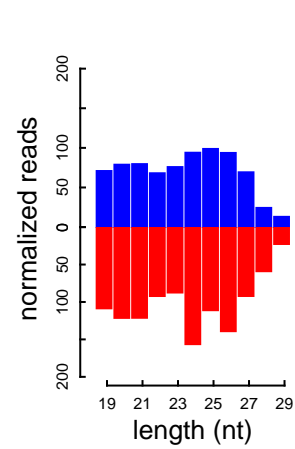
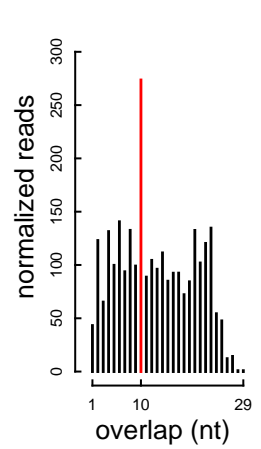
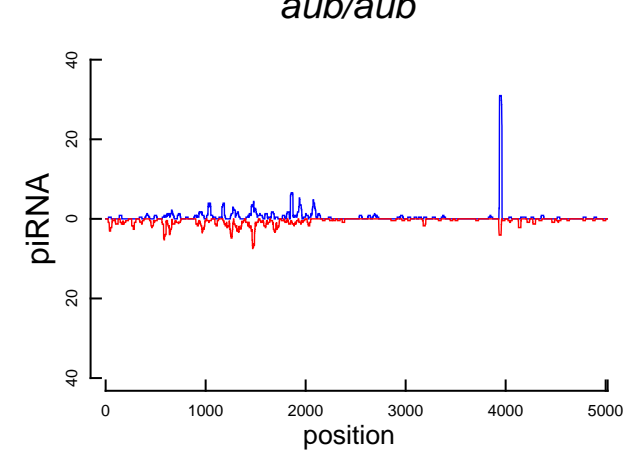
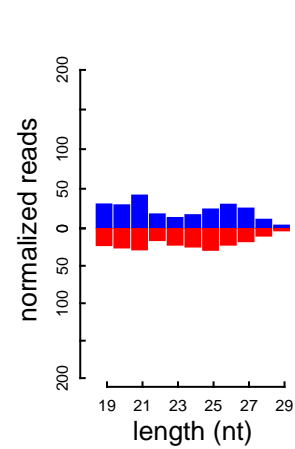
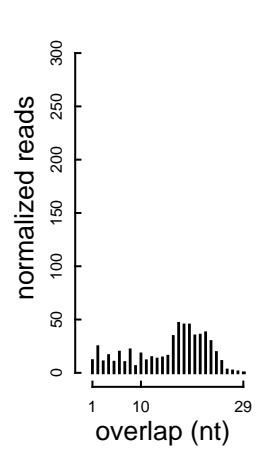
invader4

A**B****C****E****G****D****F****H**

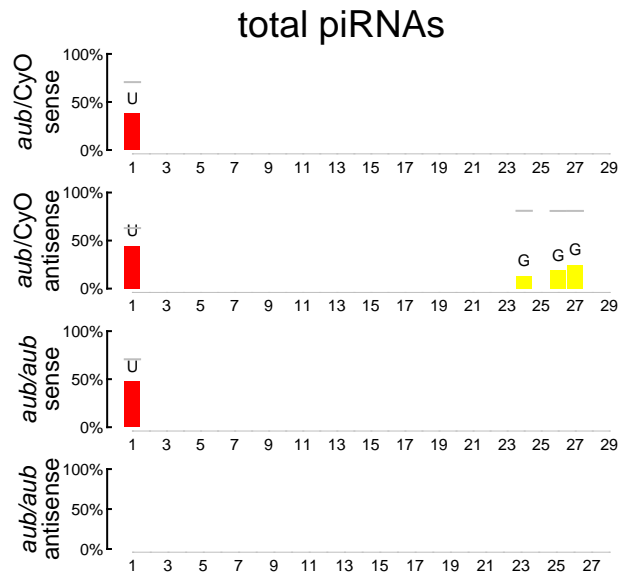
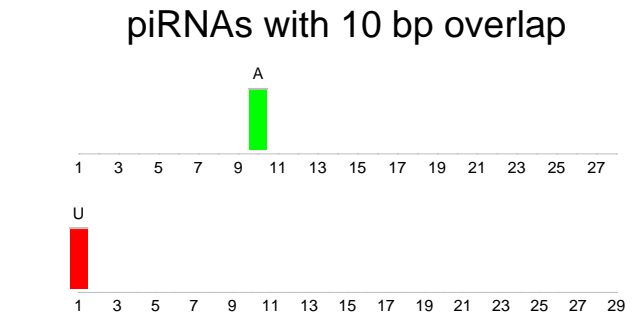
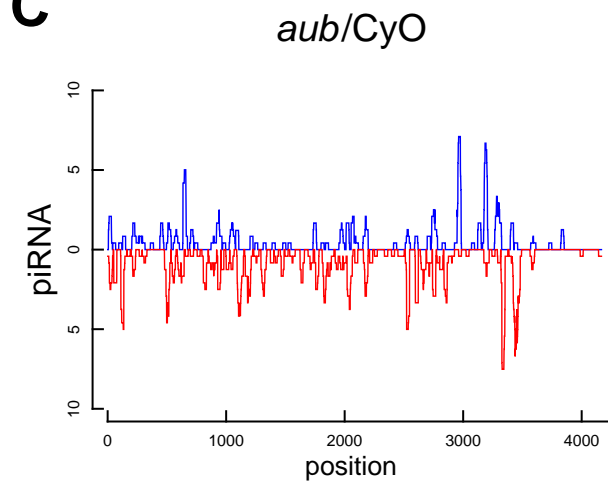
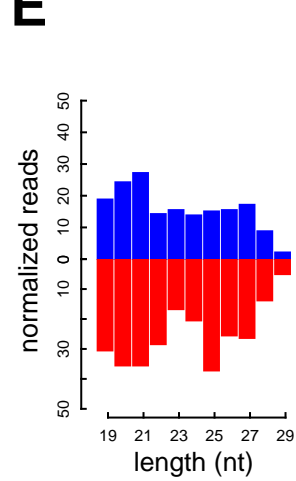
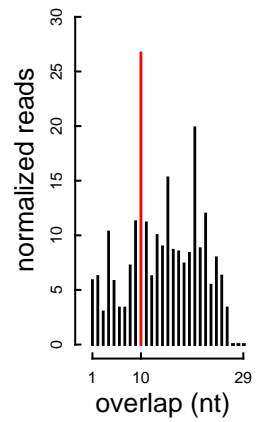
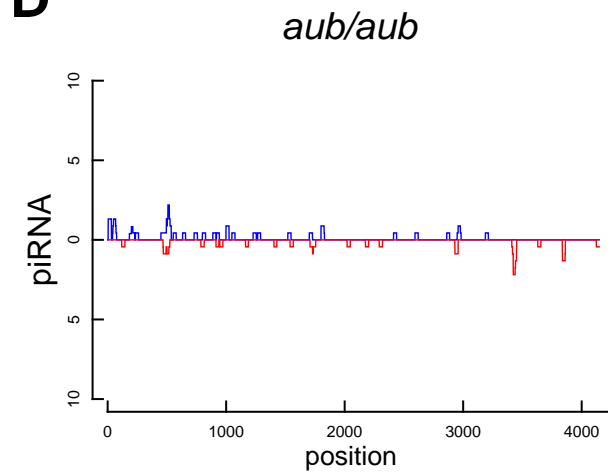
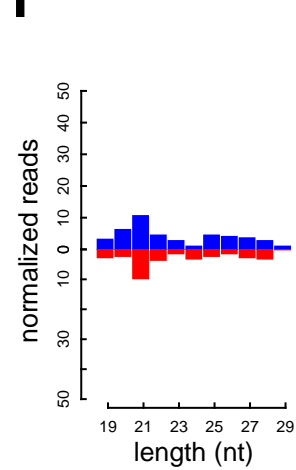
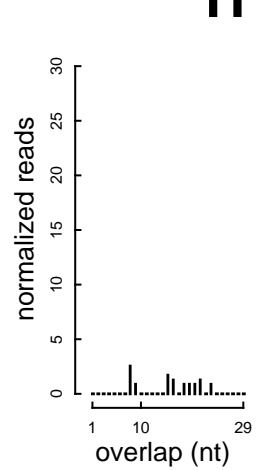
lvk

A**B****C****E****G****D****F****H**

jockey

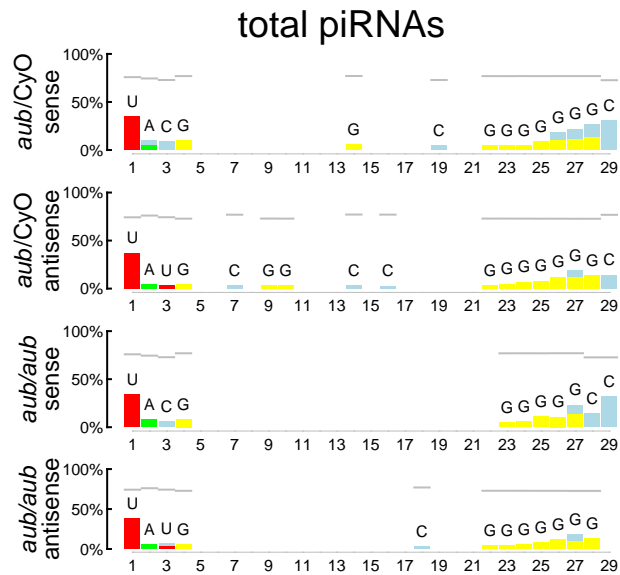
A**B****C****E****G****D****F****H**

Juan

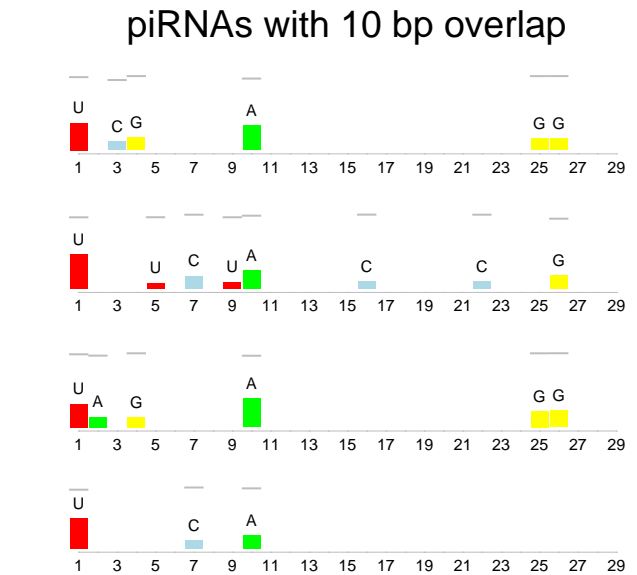
A**B****C****E****G****D****F****H**

Max element

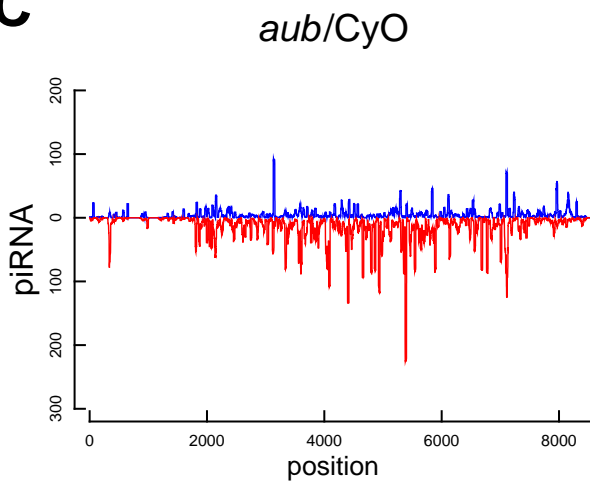
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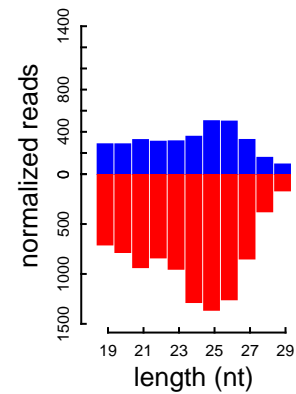
B



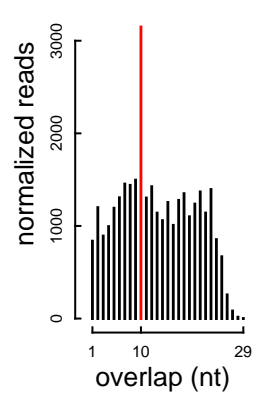
C



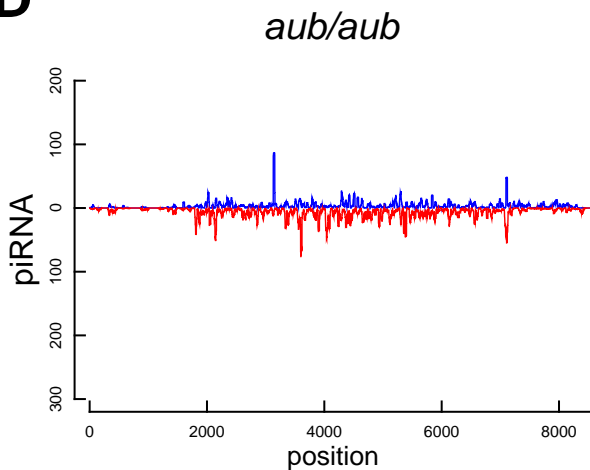
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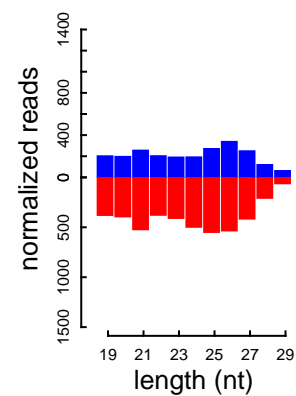
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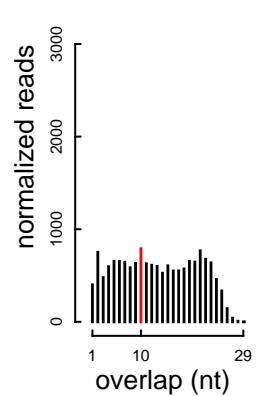
D



F

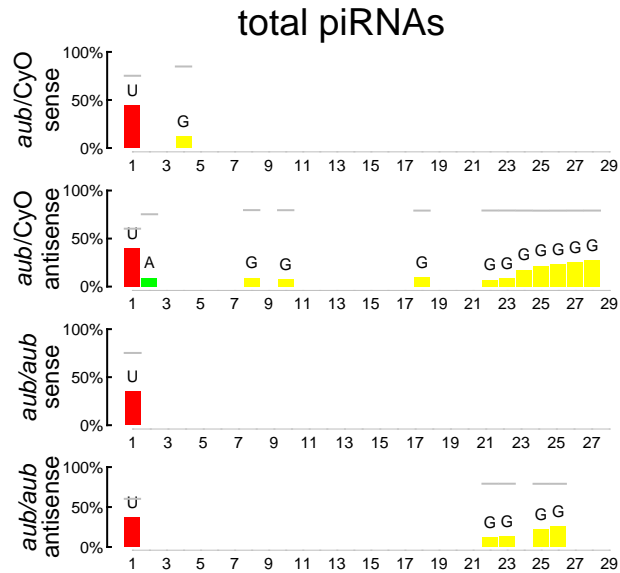


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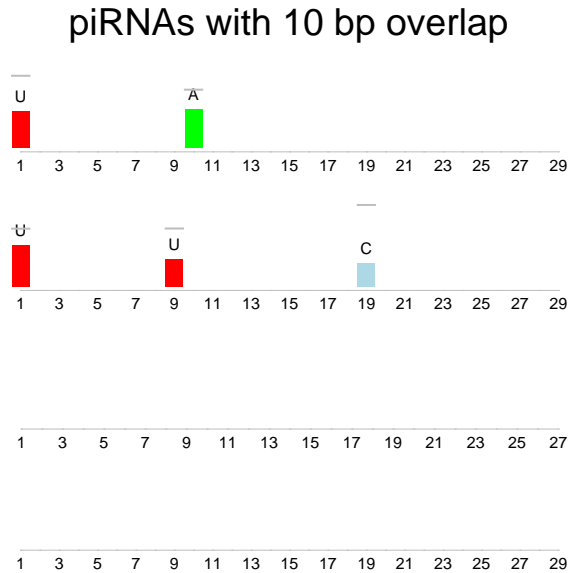


McClintock

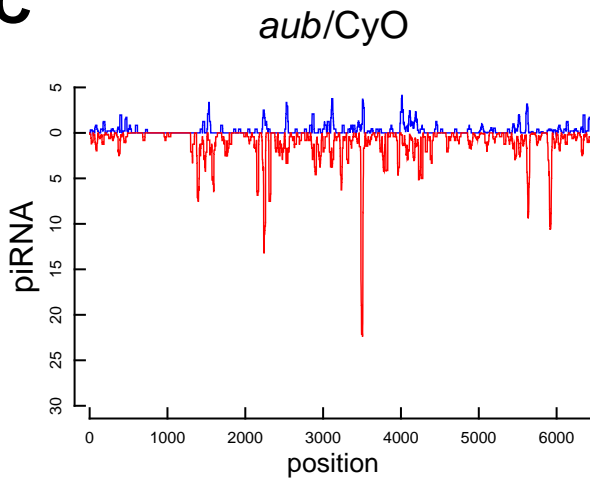
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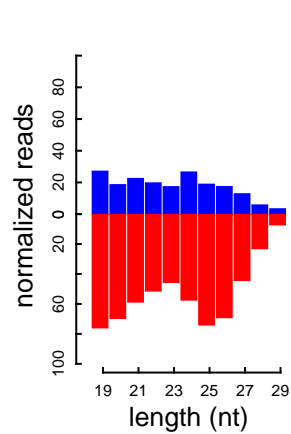
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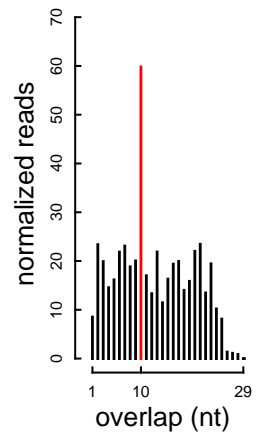
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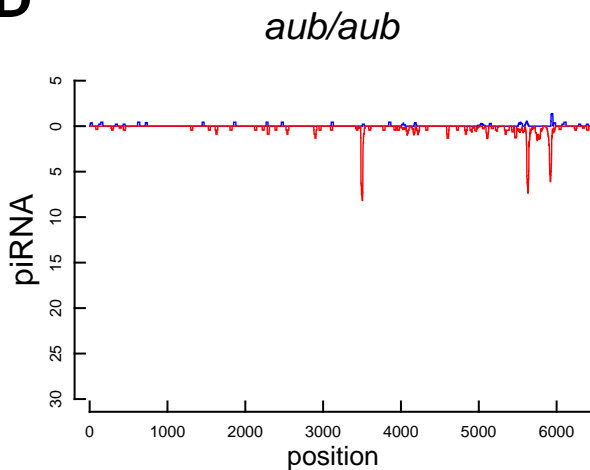
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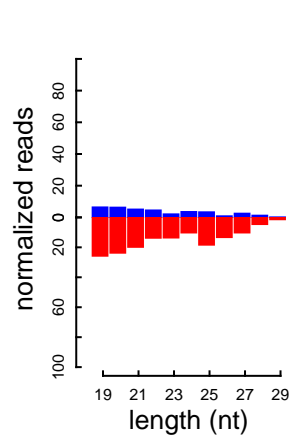
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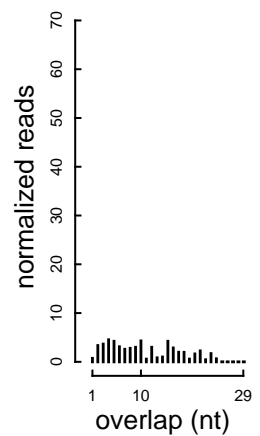
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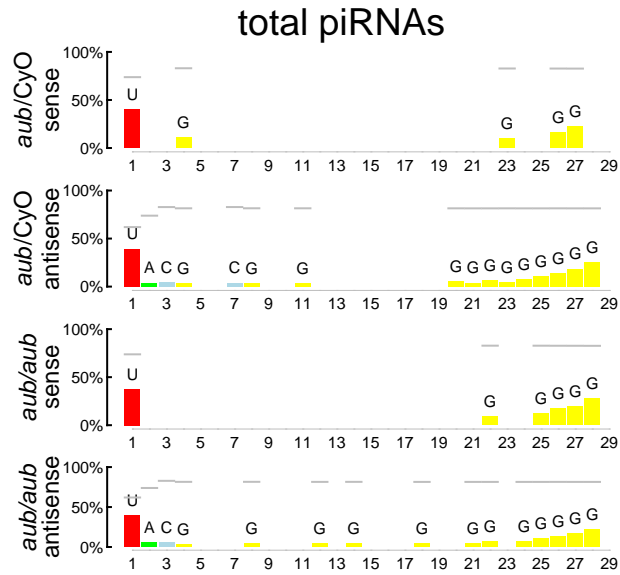
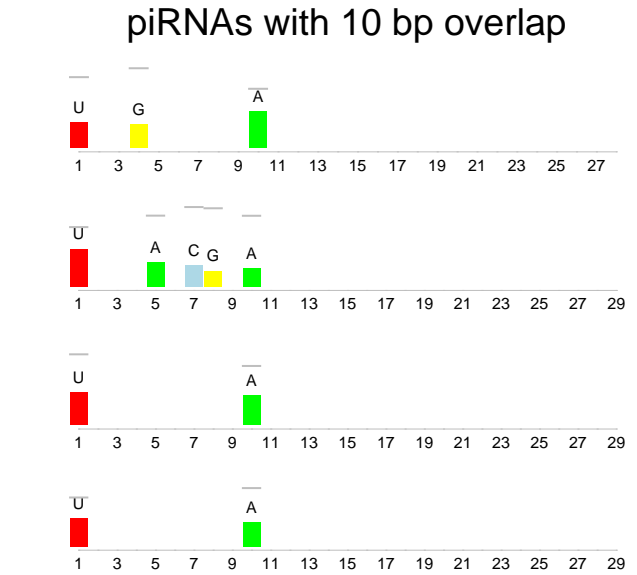
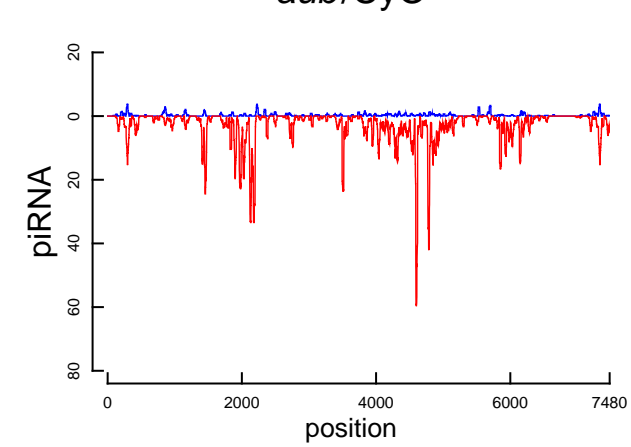
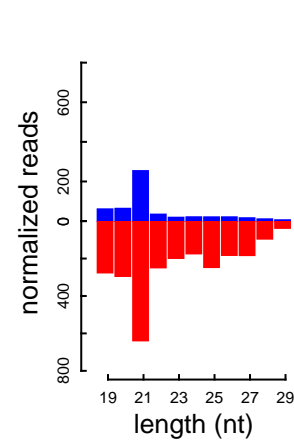
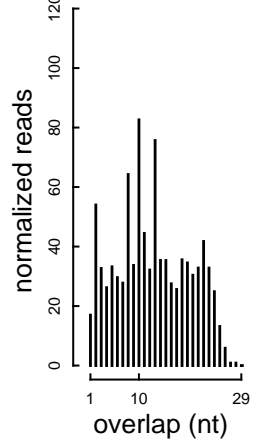
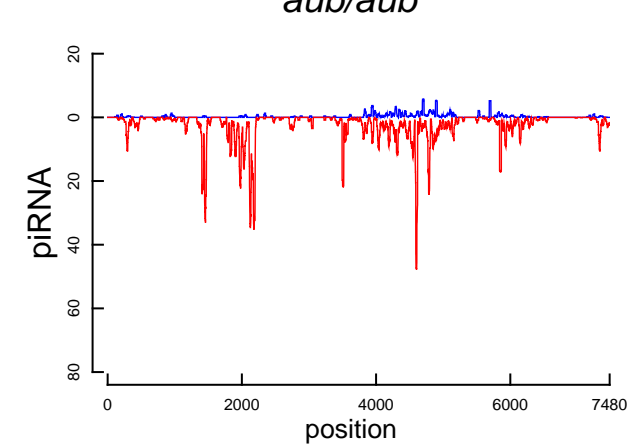
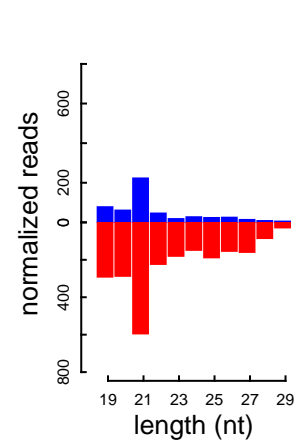
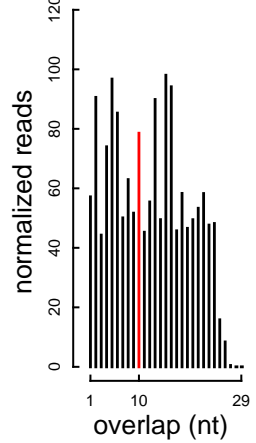
F



H

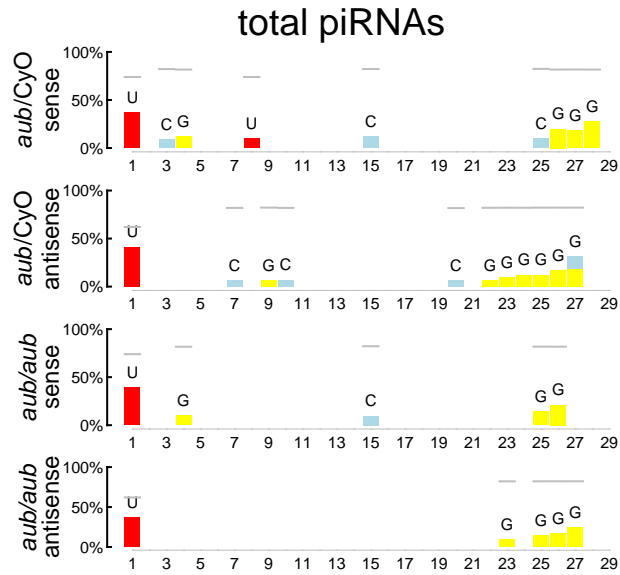


mdg1

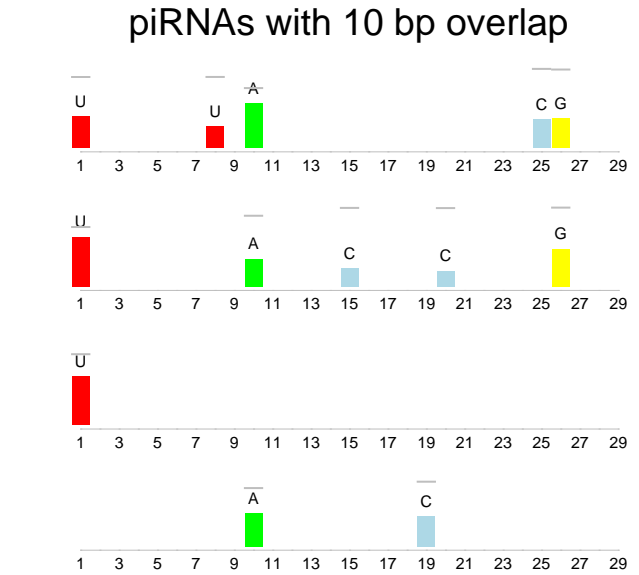
A**B****C****E****G****D****F****H**

mdg3

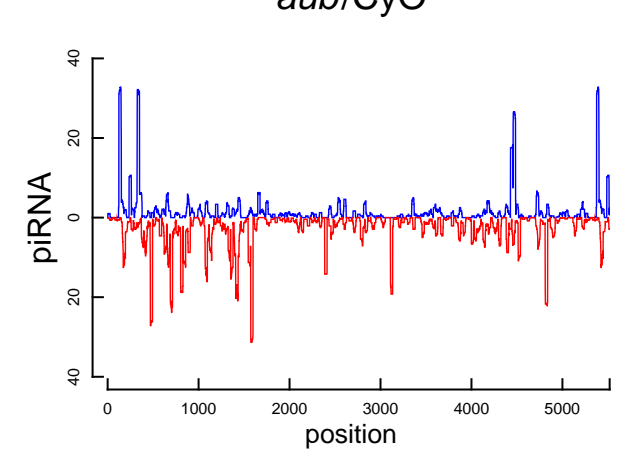
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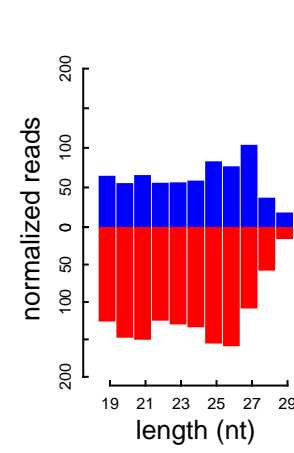
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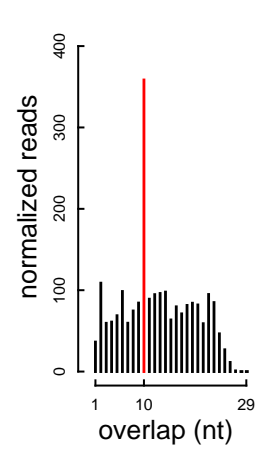
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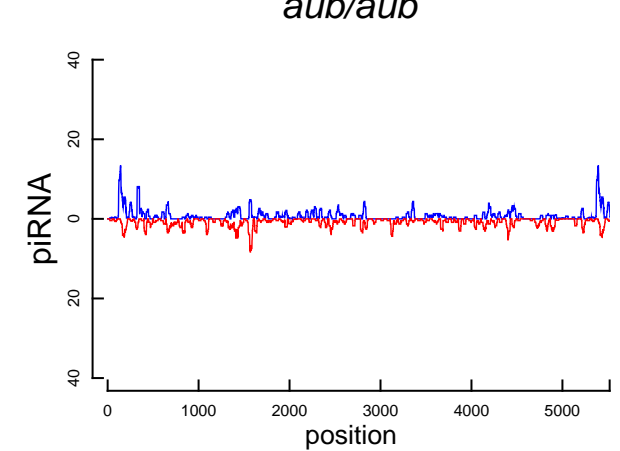
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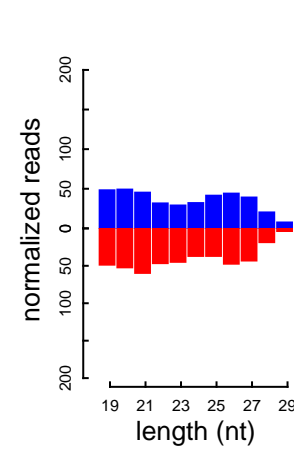
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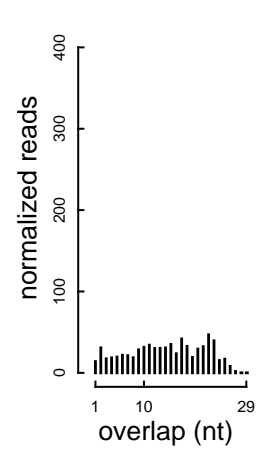
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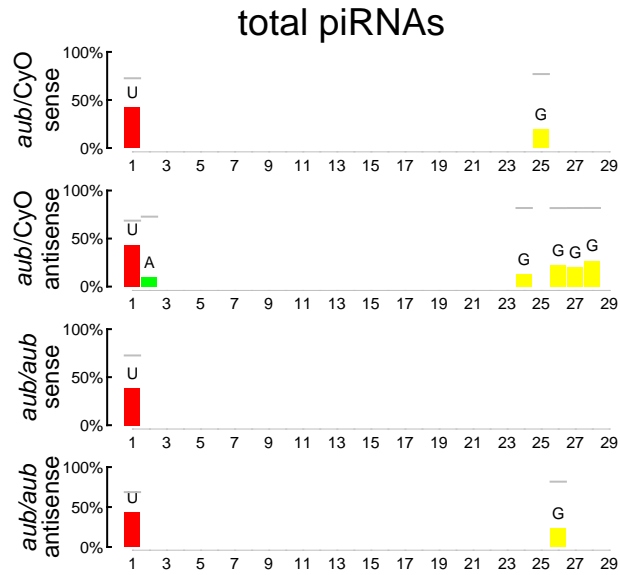
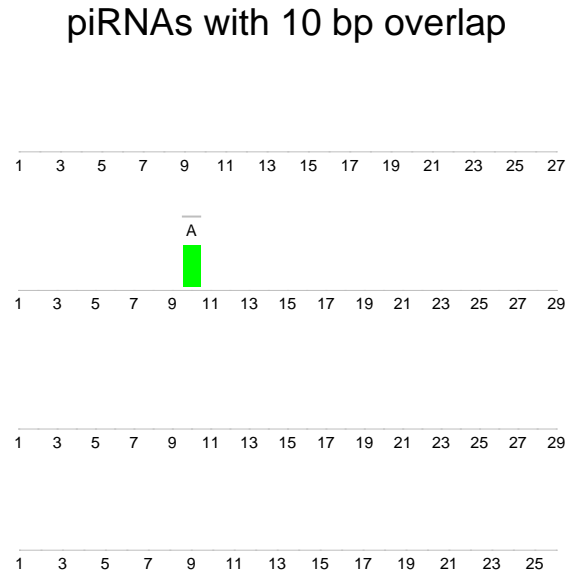
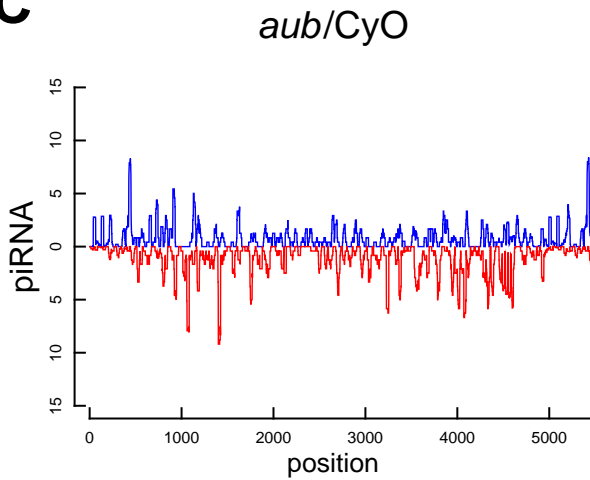
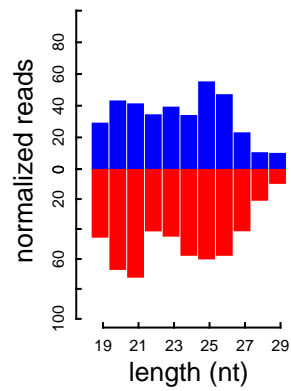
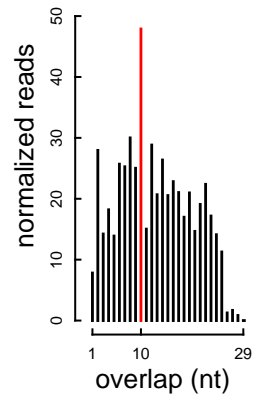
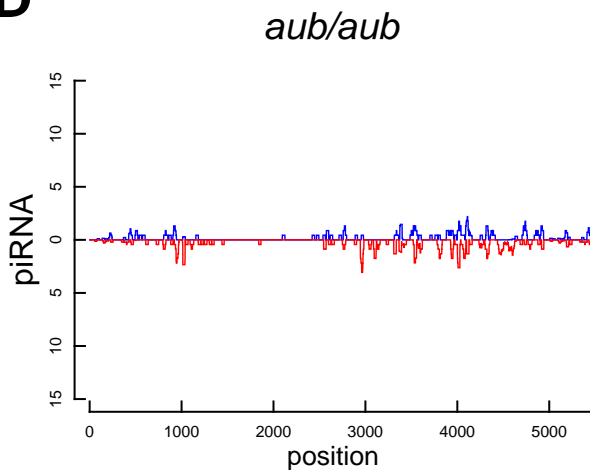
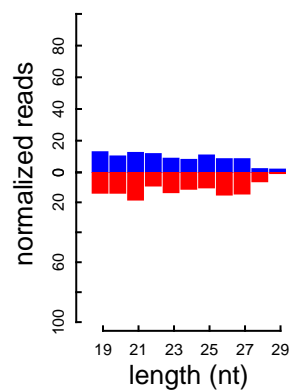
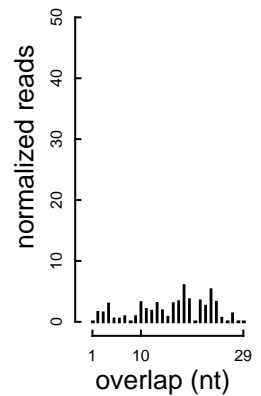
F



H

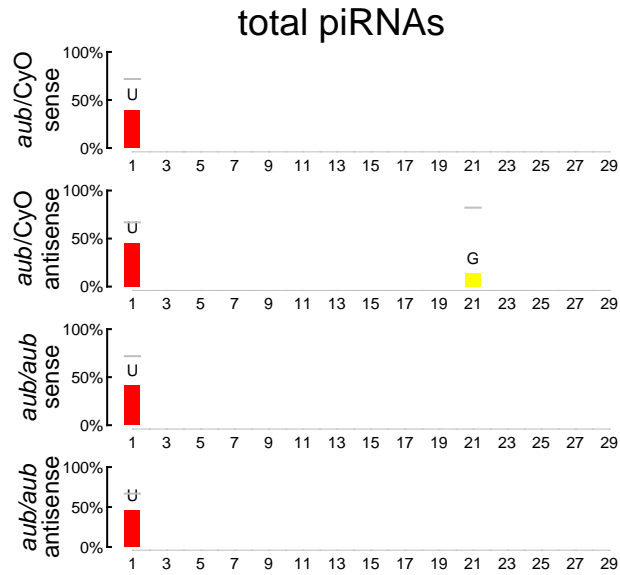


micropia

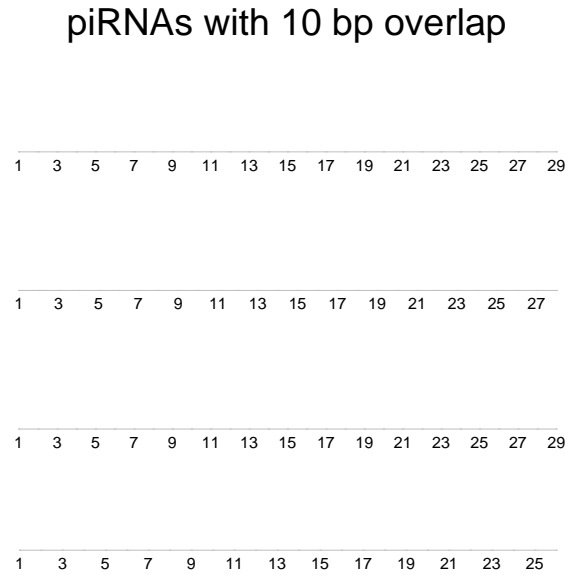
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NOF

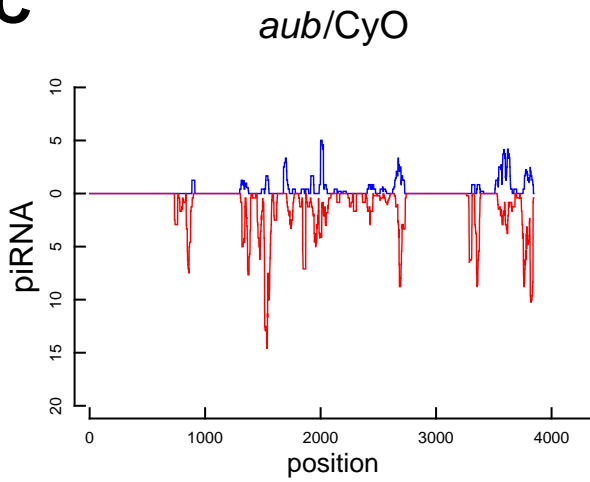
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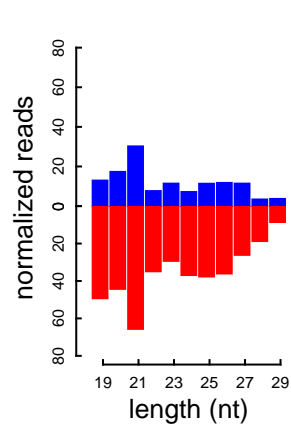
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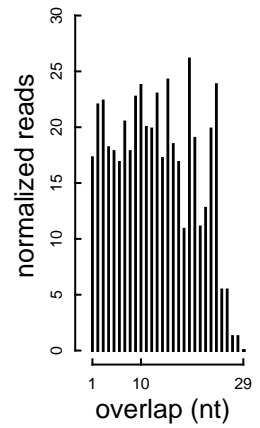
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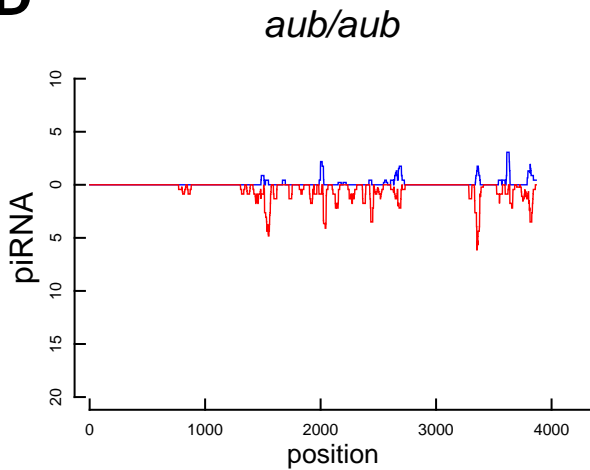
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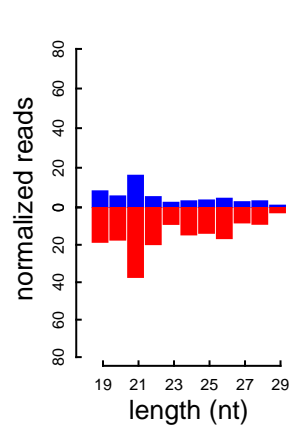
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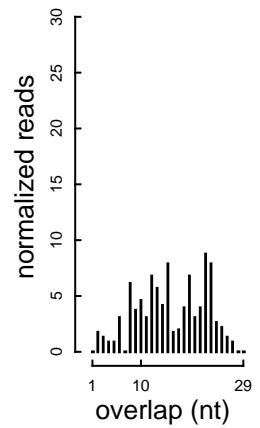
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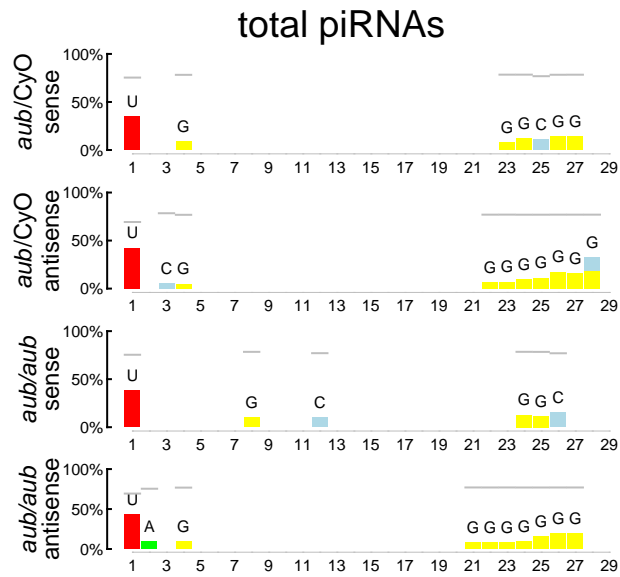
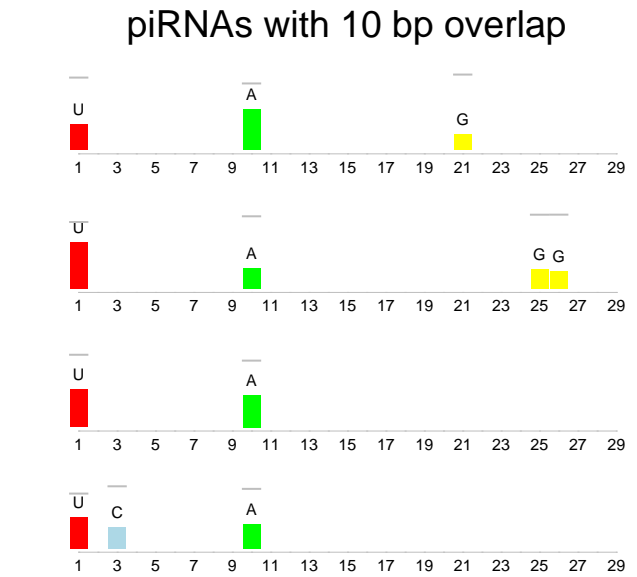
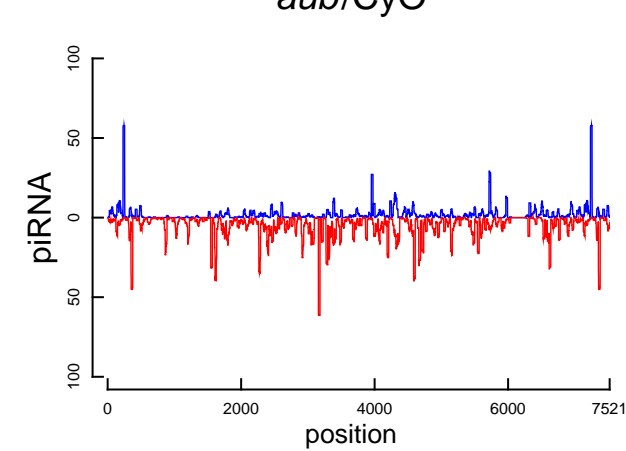
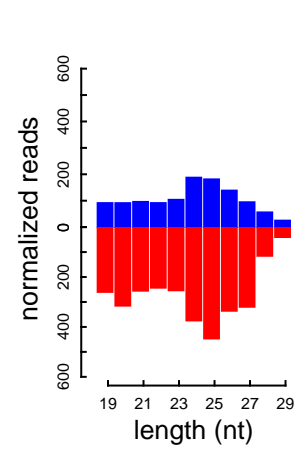
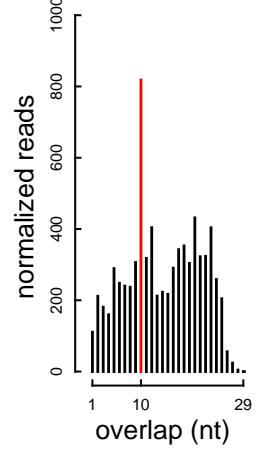
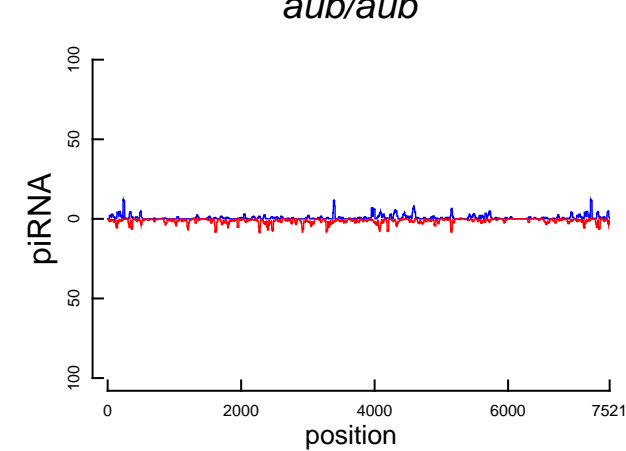
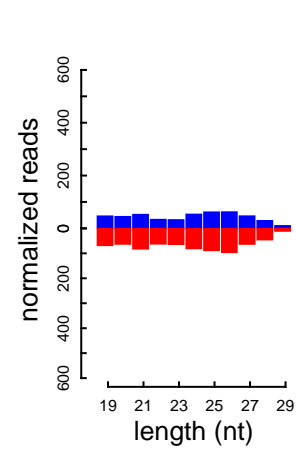
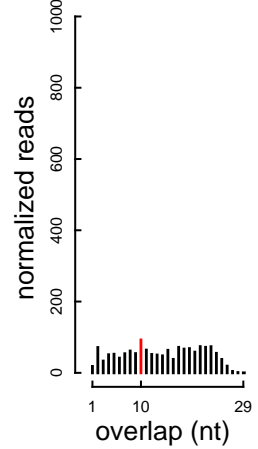
F



H

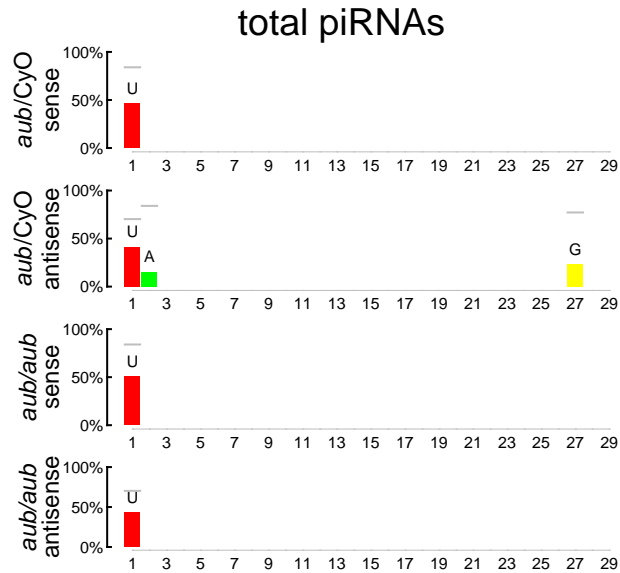


opus

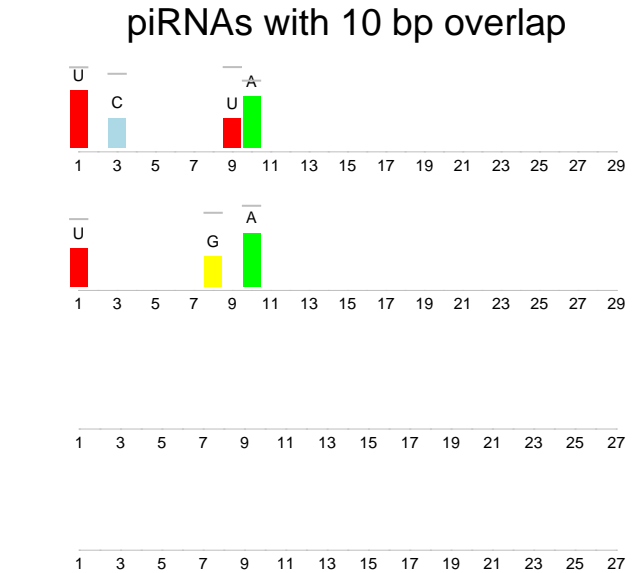
A**B****C****E****G****D****F****H**

Osvaldo

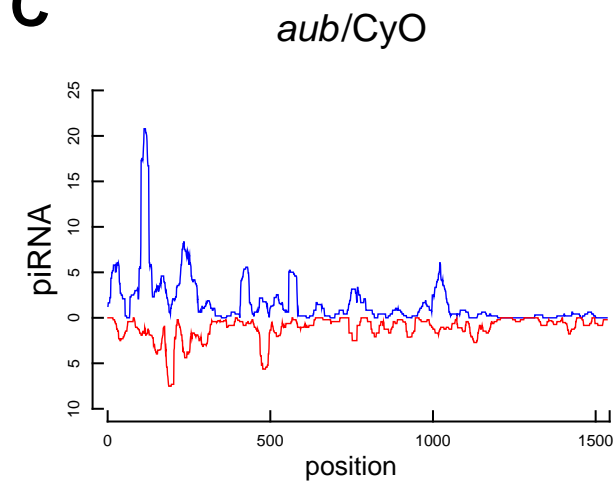
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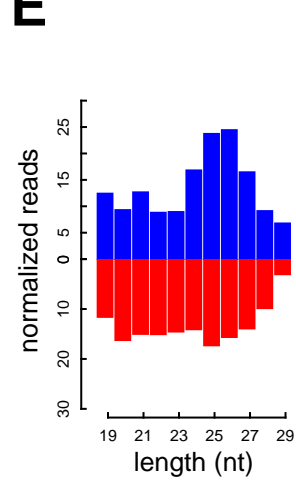
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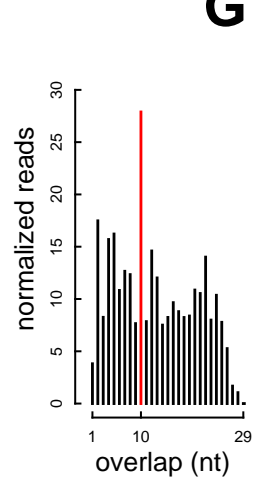
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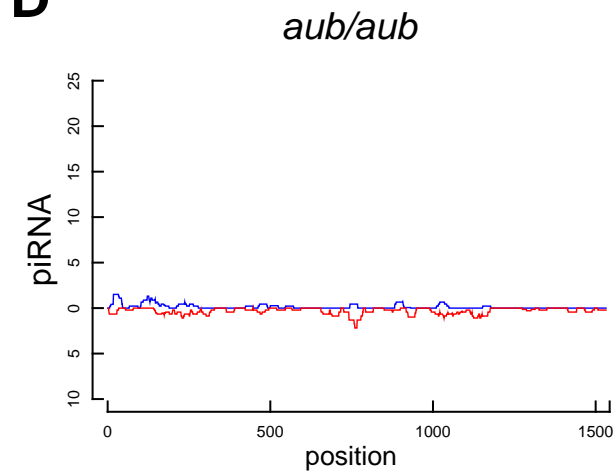
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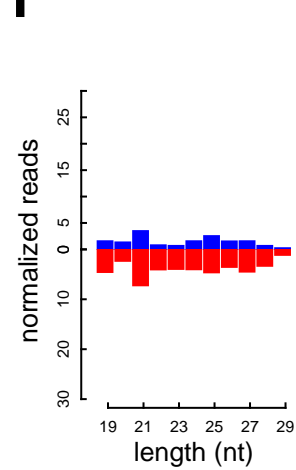
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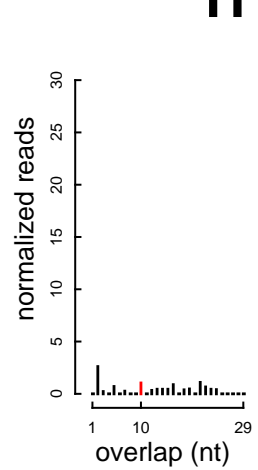
D



F

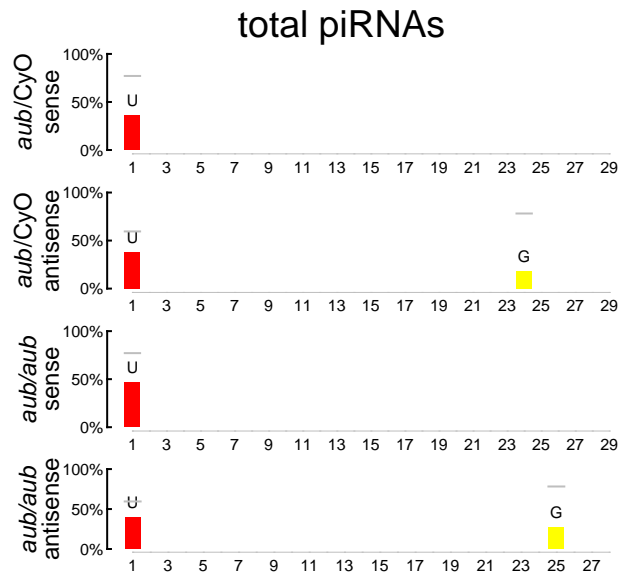


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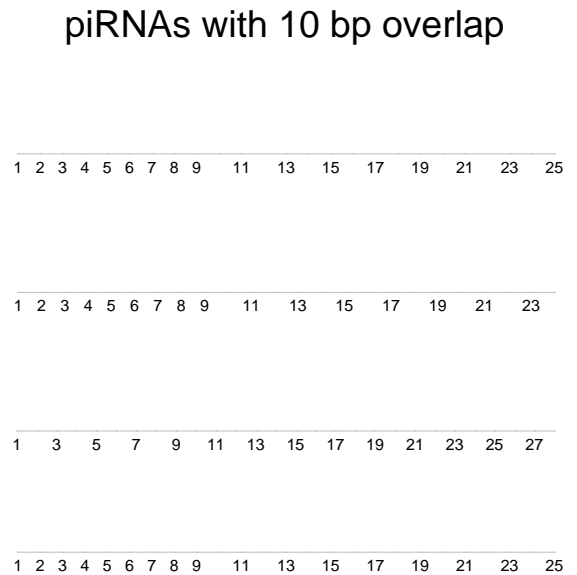


Porto1

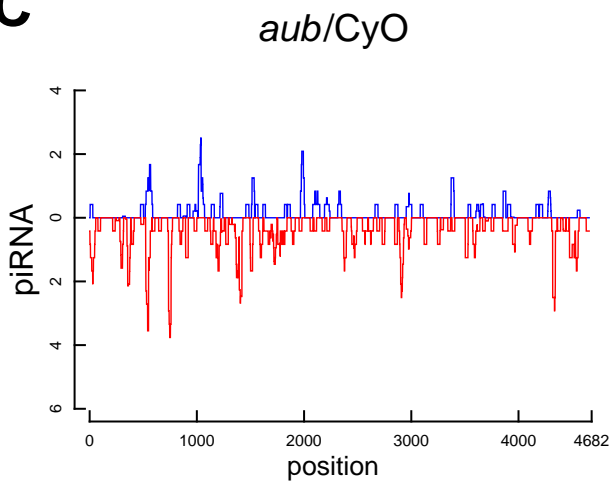
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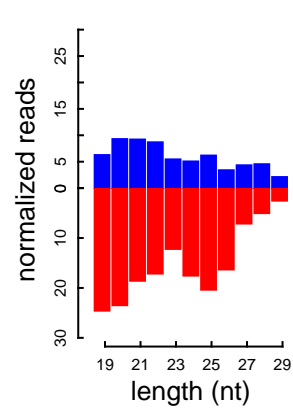
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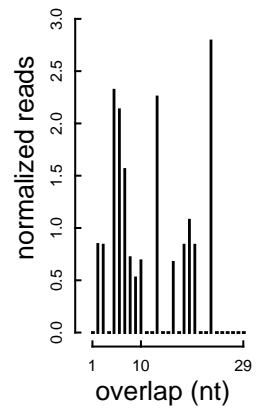
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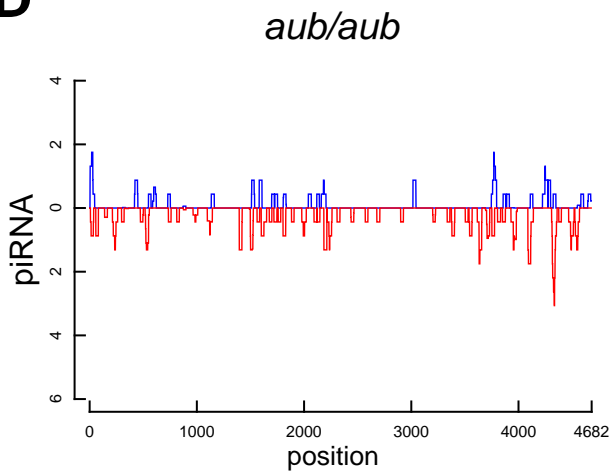
E



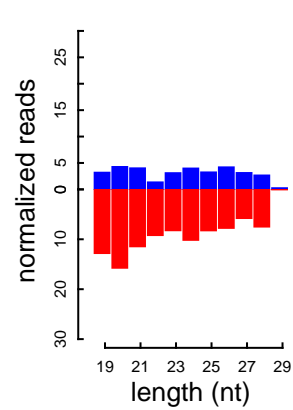
G



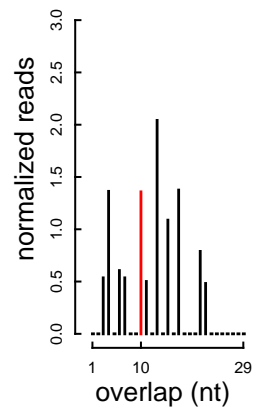
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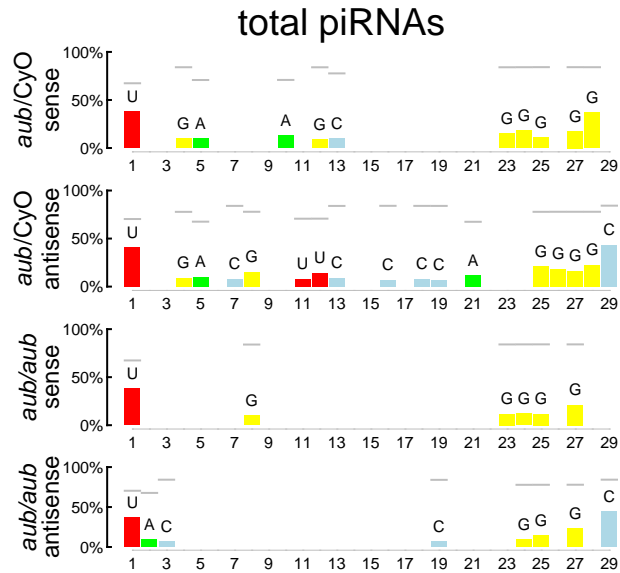
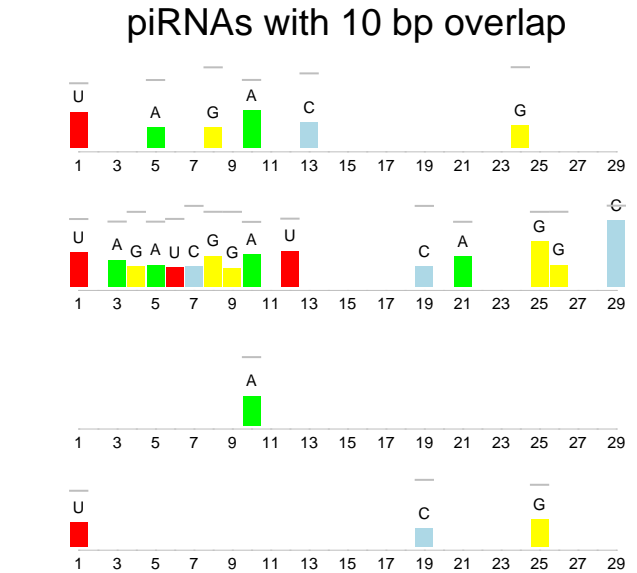
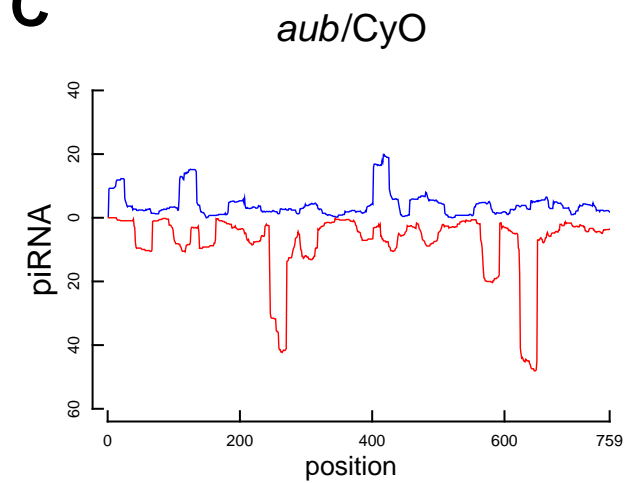
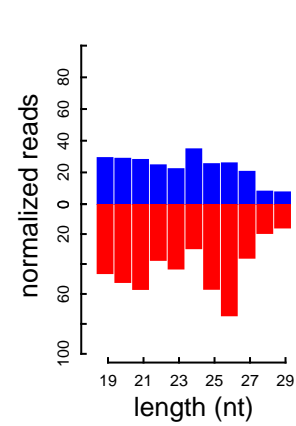
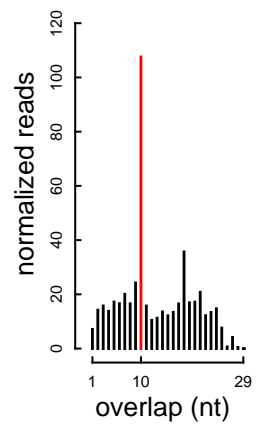
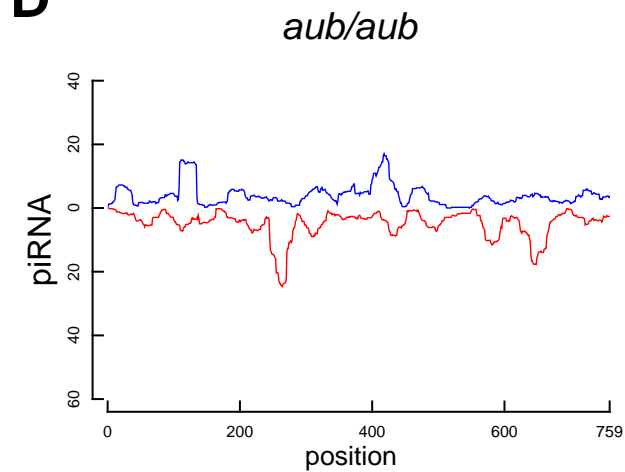
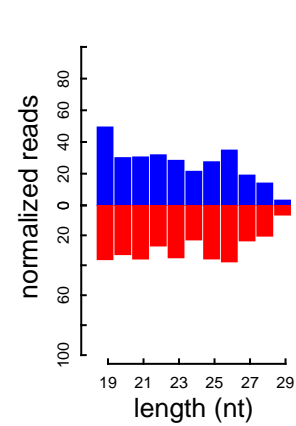
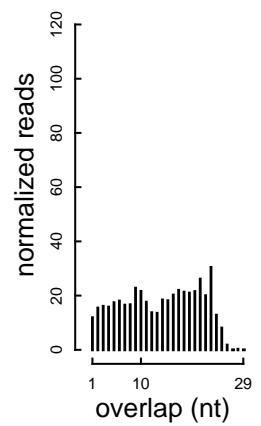
F



H

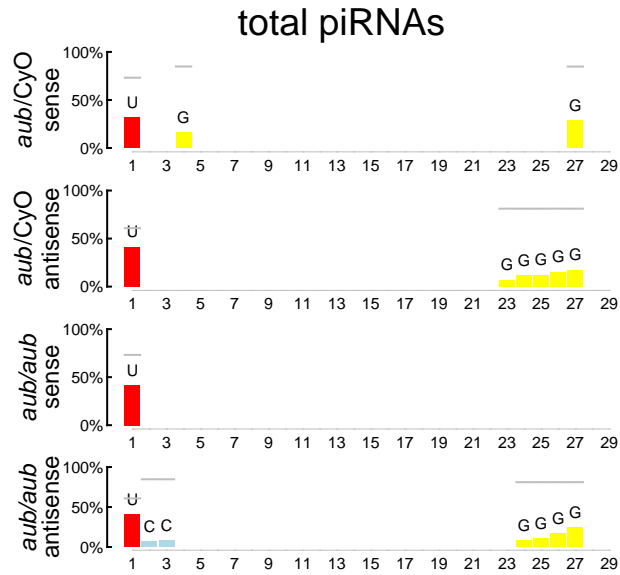


Q element

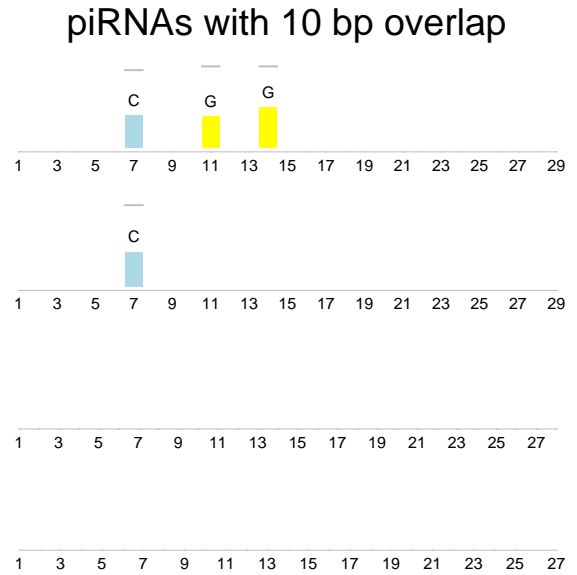
A**B****C****E****G****D****F****H**

Quasimodo

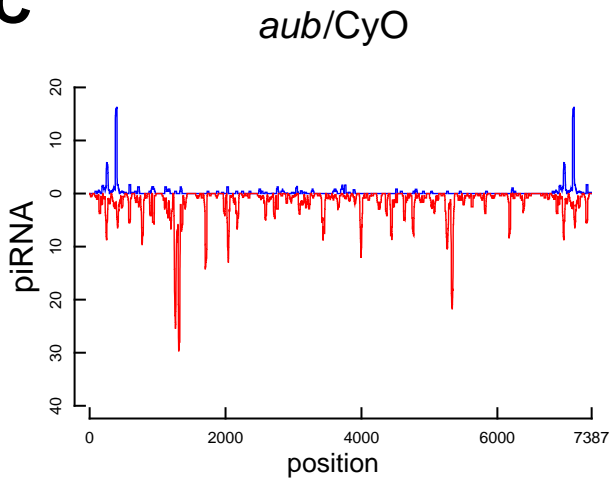
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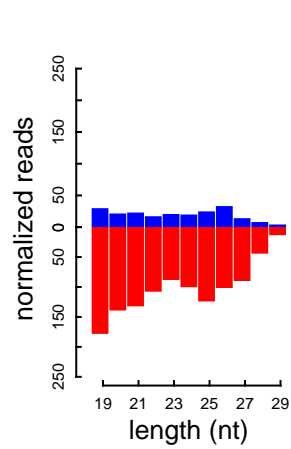
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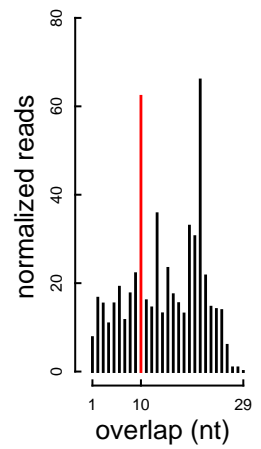
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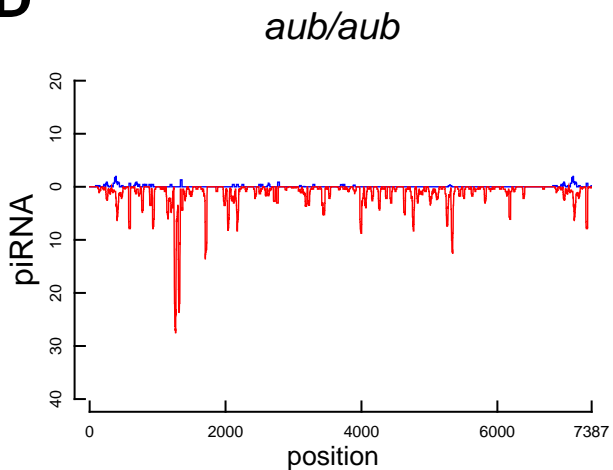
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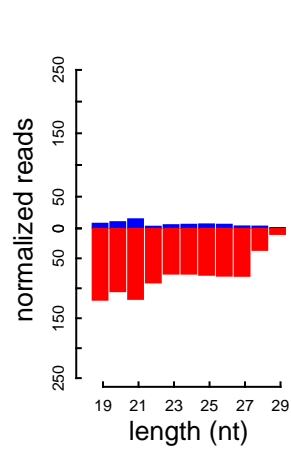
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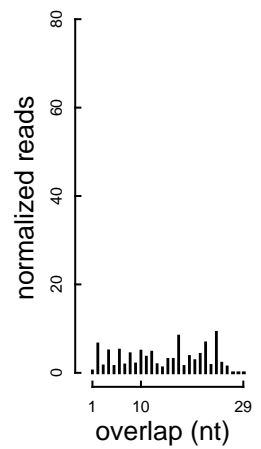
D



F

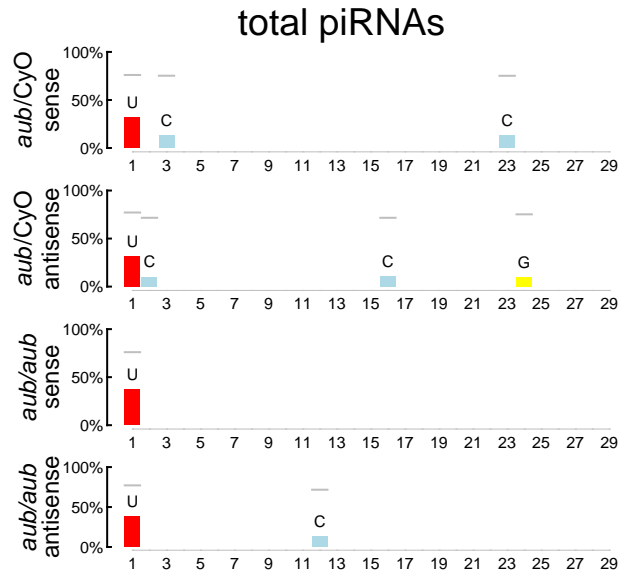


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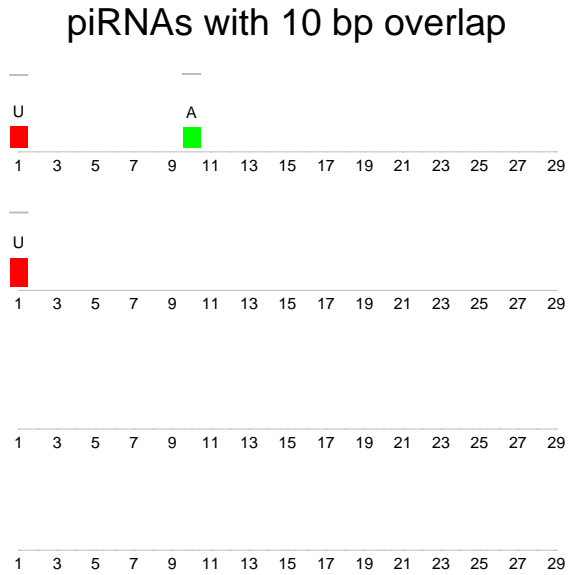


R1 2

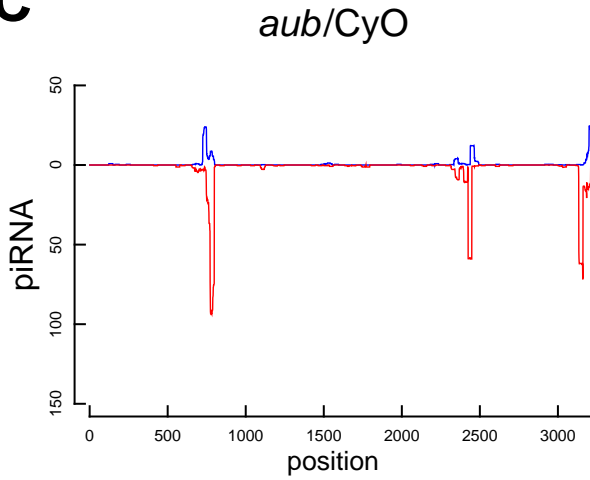
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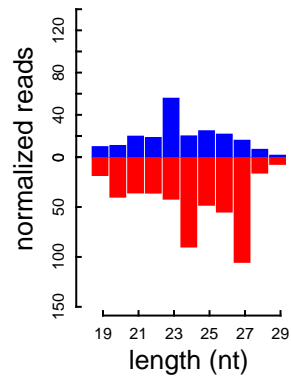
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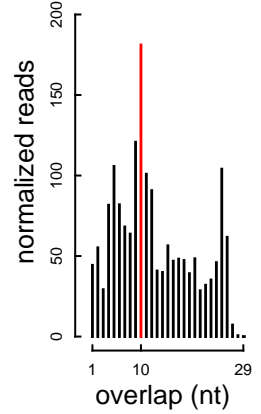
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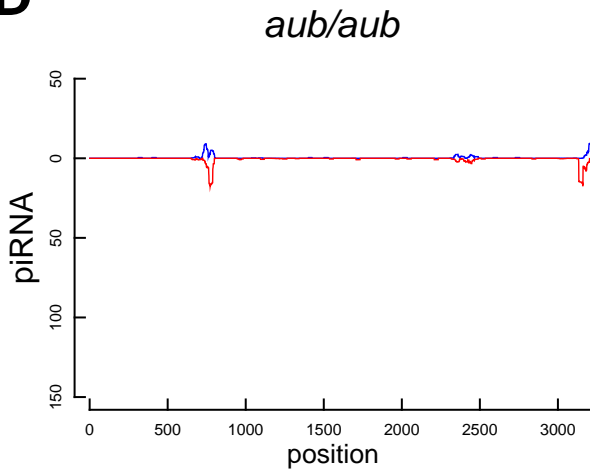
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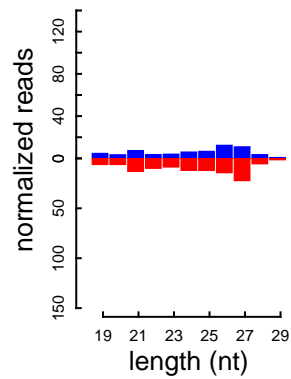
G



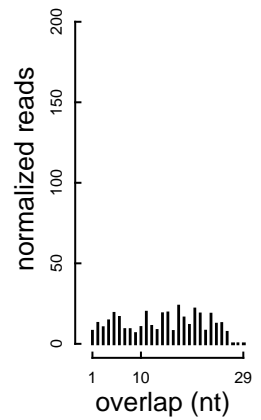
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F

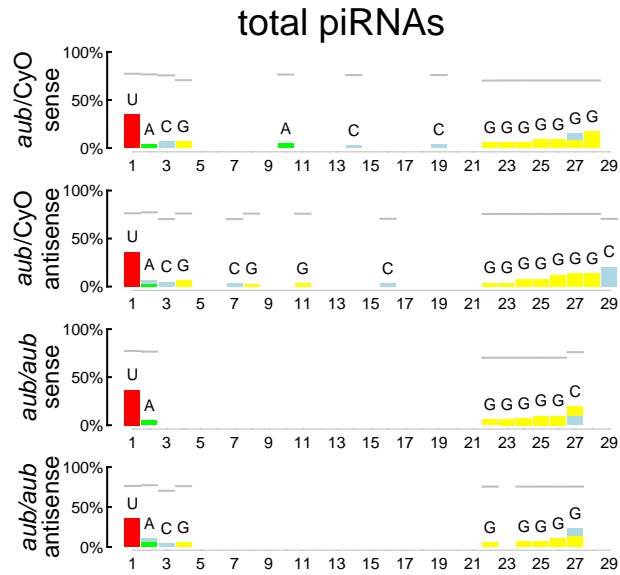


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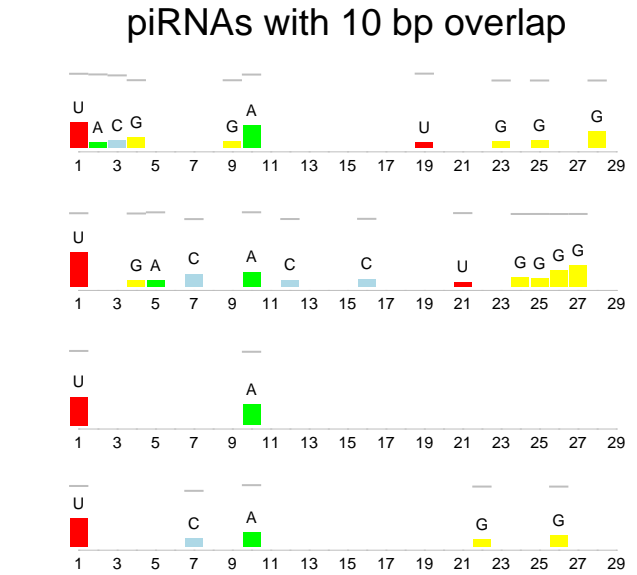


R1A1 element

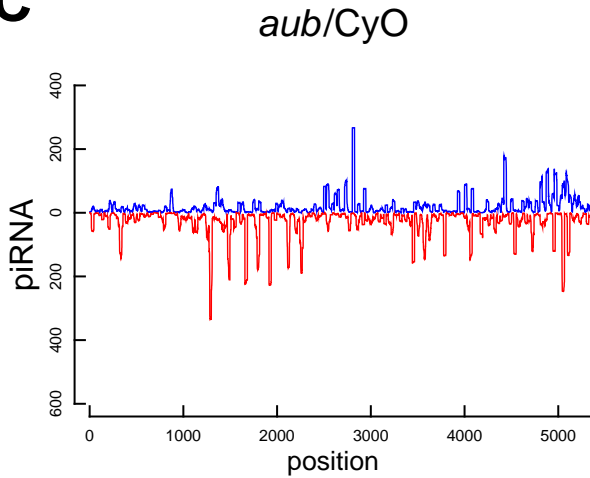
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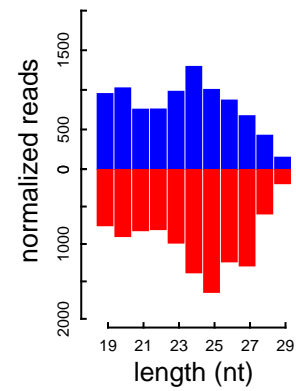
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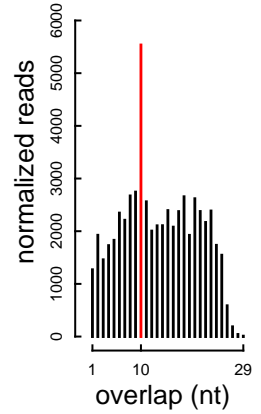
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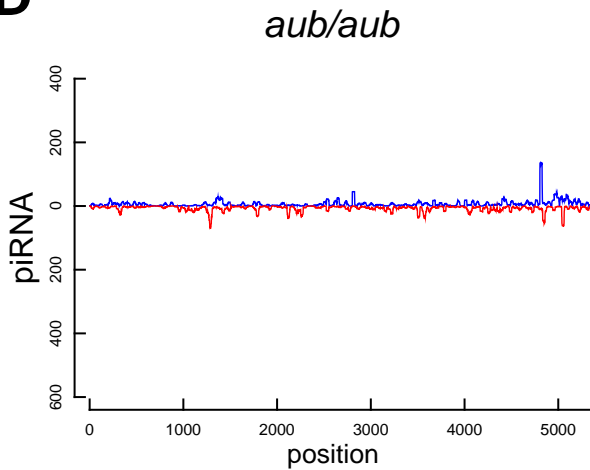
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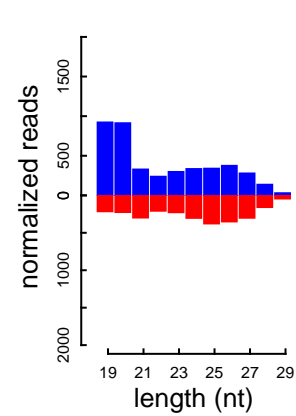
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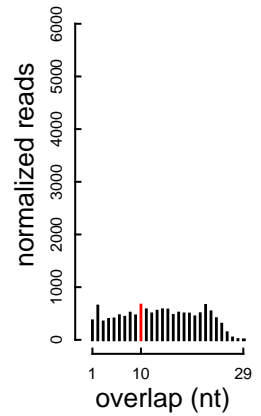
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F

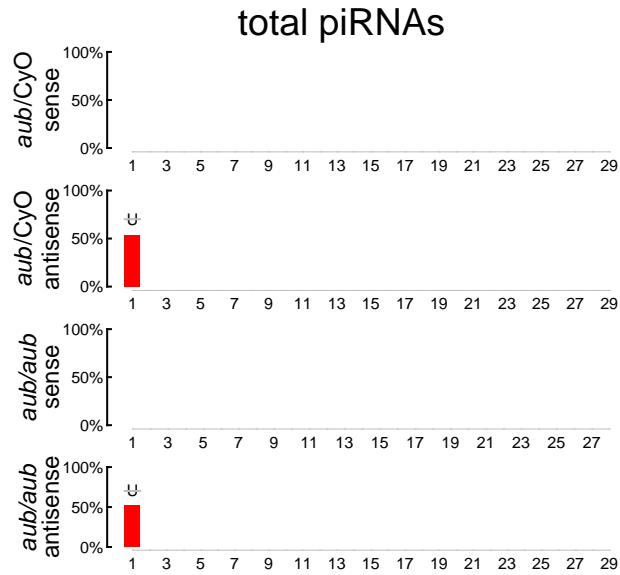


H

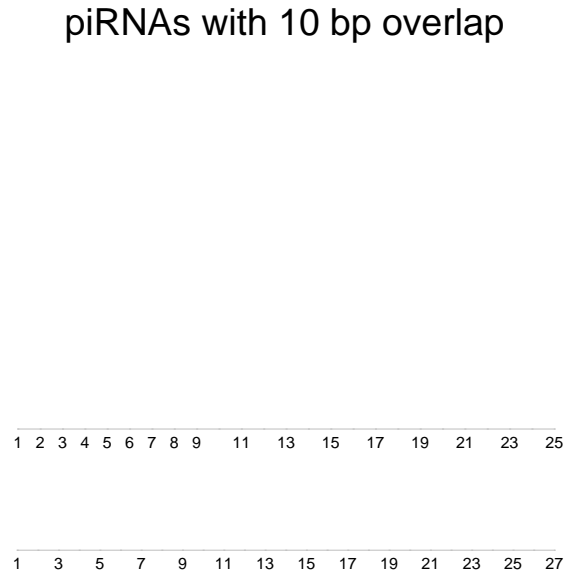


R2 element

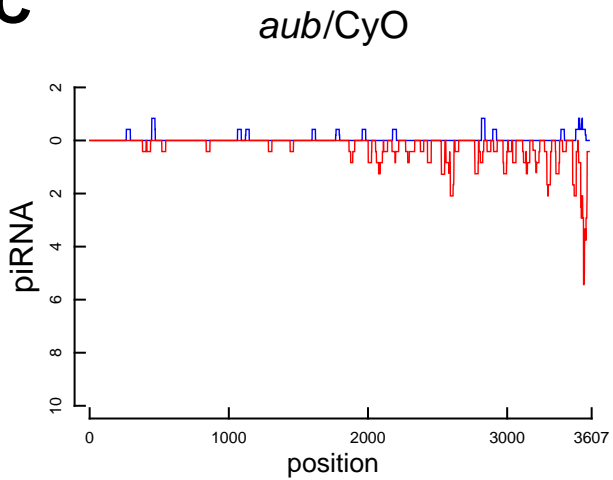
A



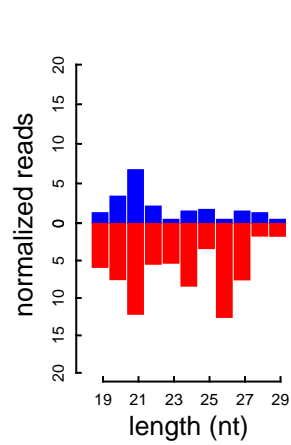
B



C



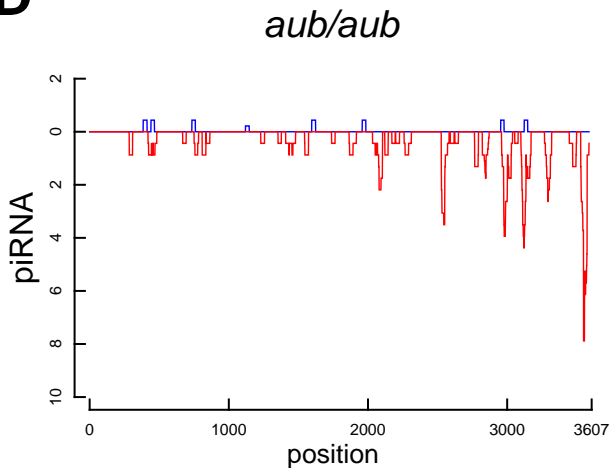
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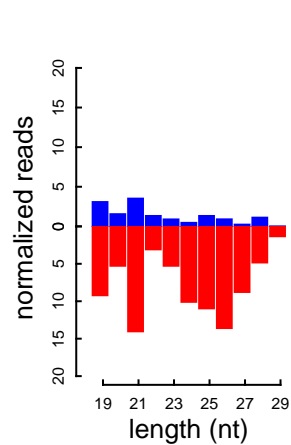
G



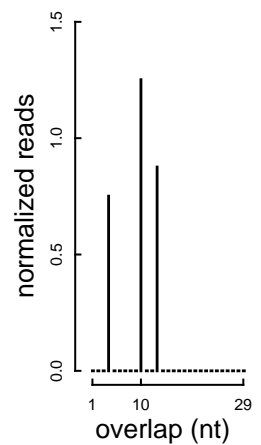
D



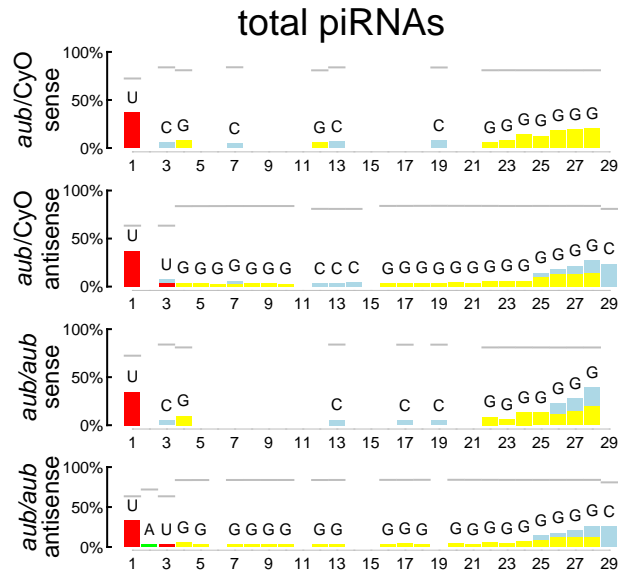
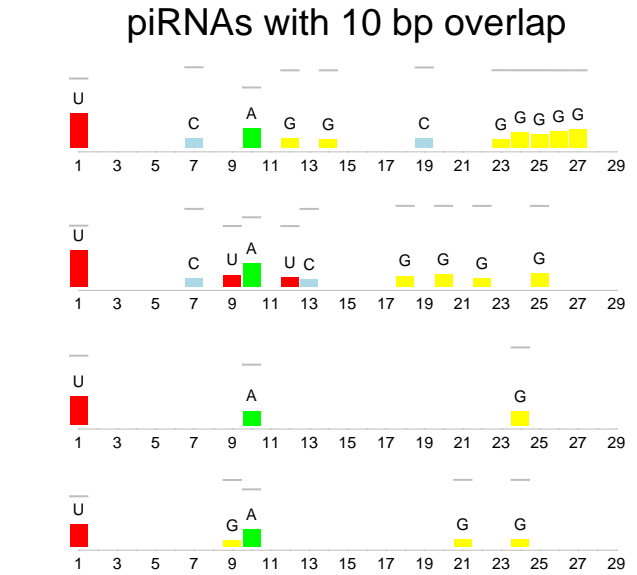
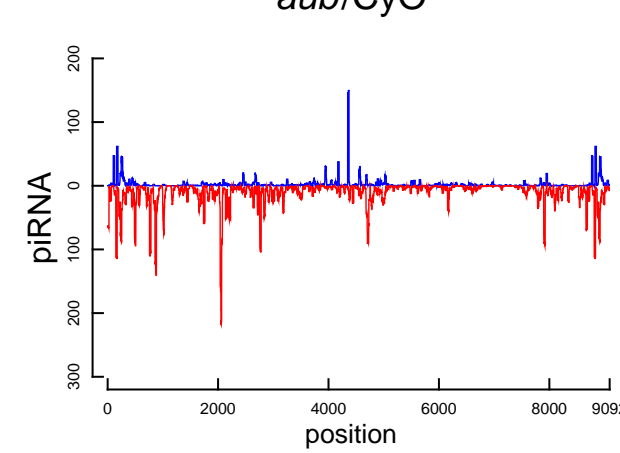
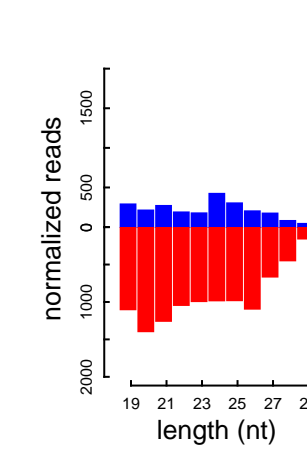
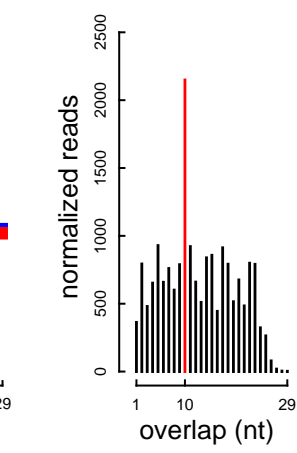
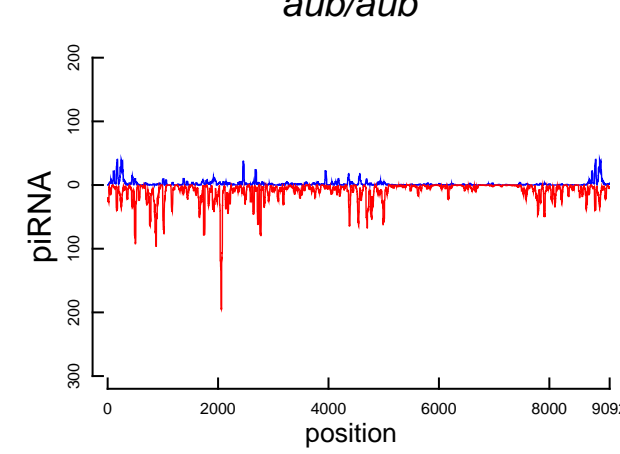
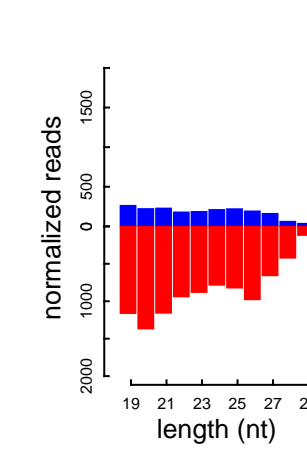
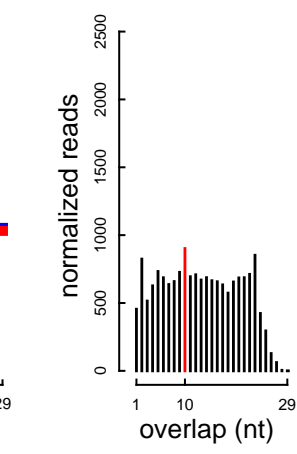
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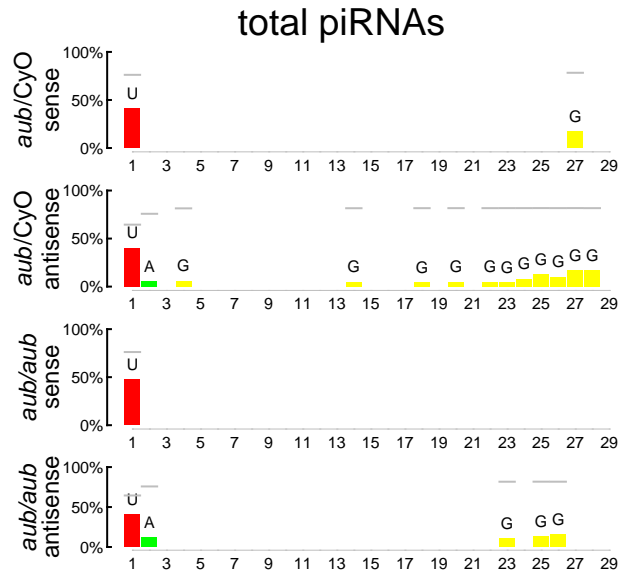
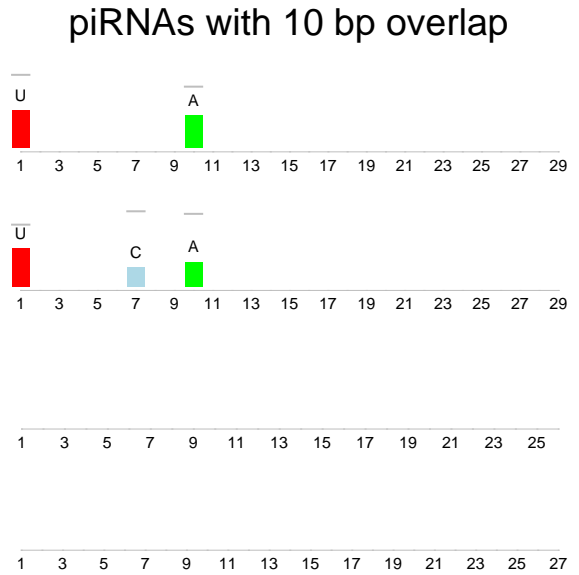
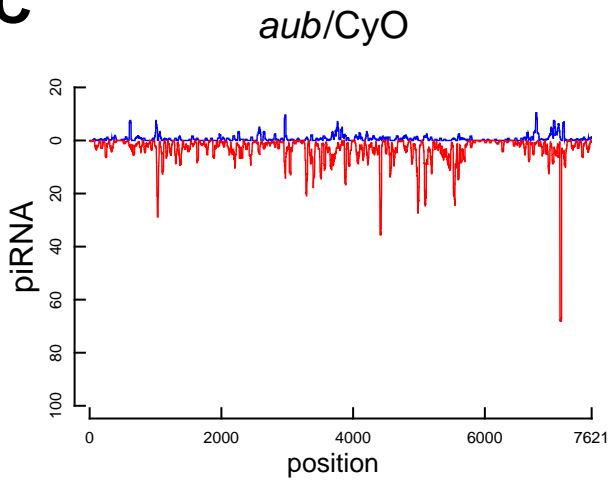
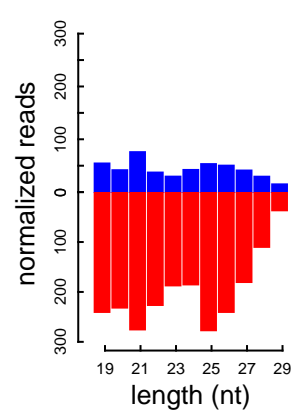
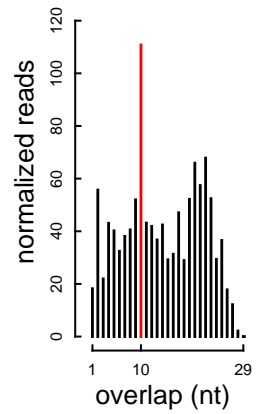
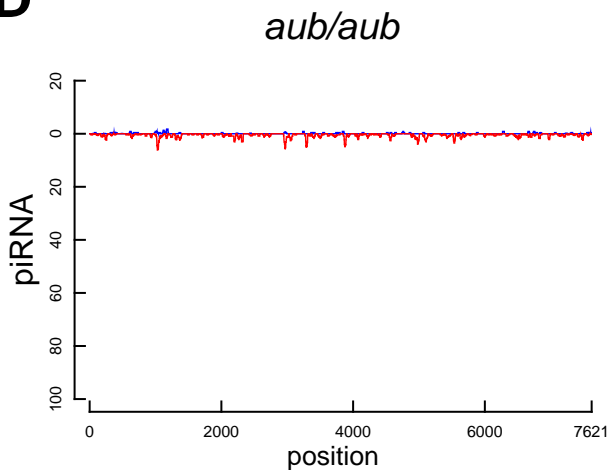
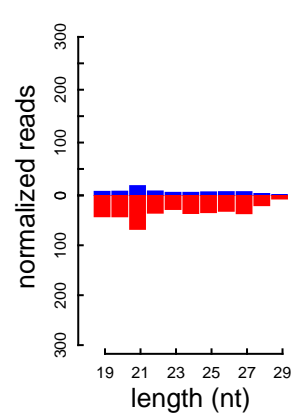
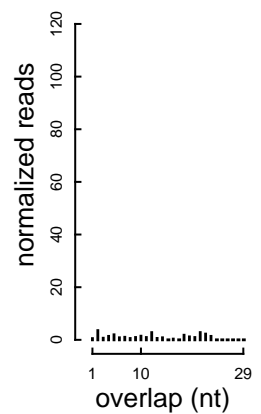
H



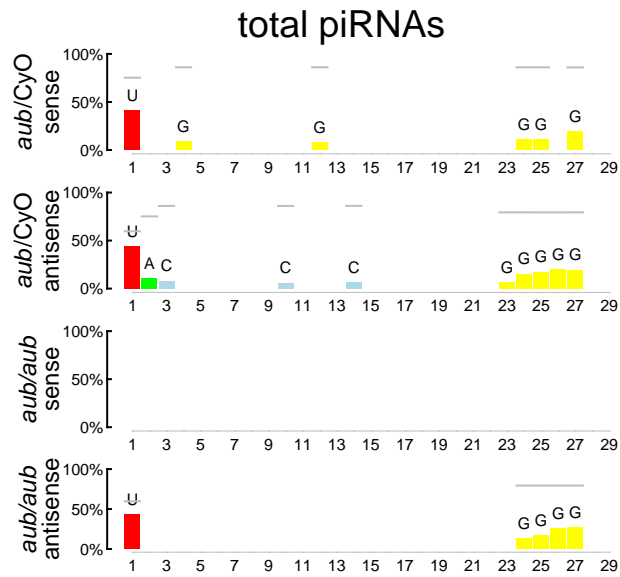
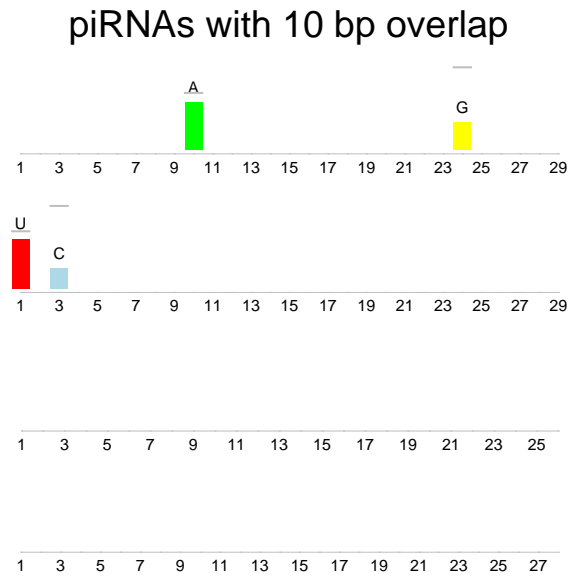
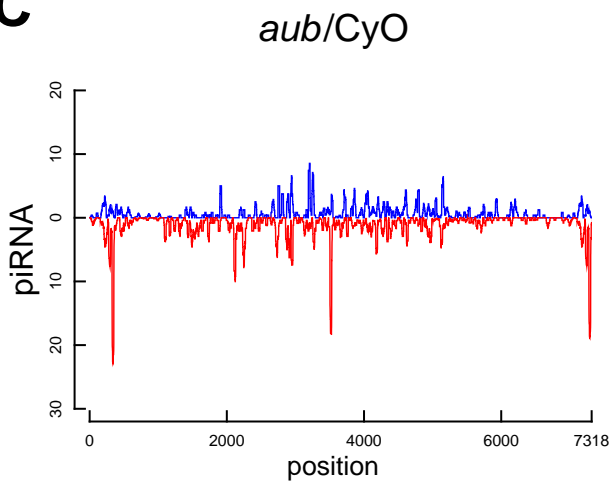
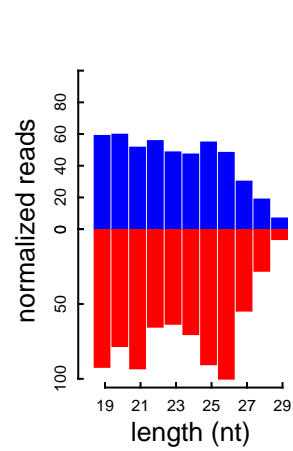
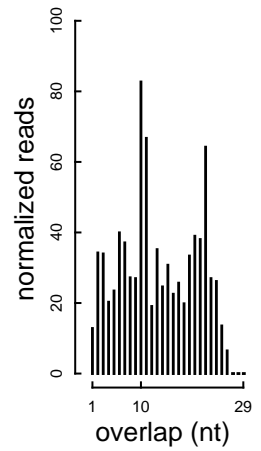
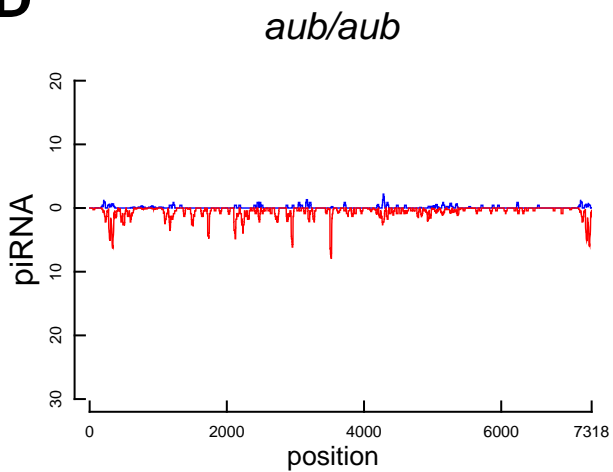
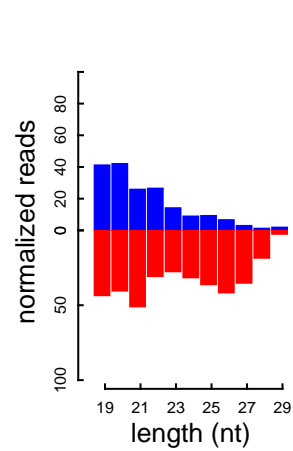
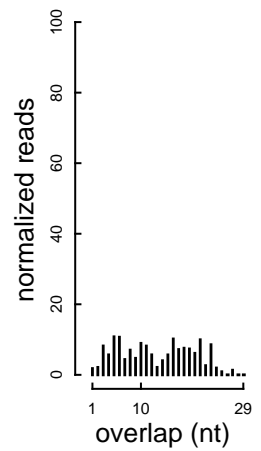
roo

A**B****C****E****G****D****F****H**

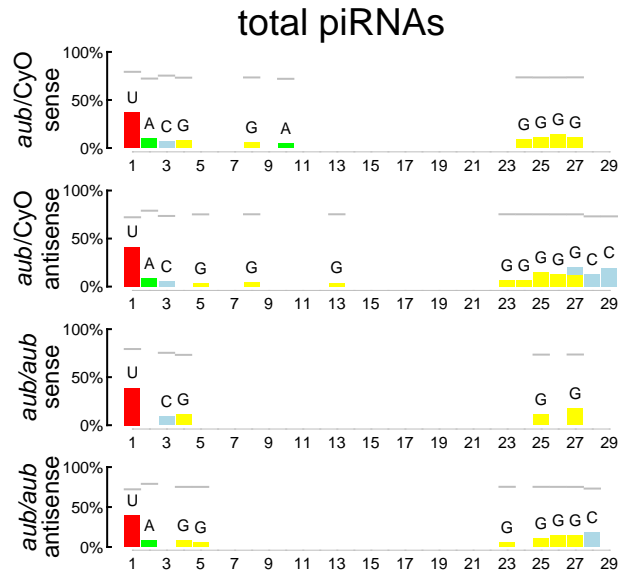
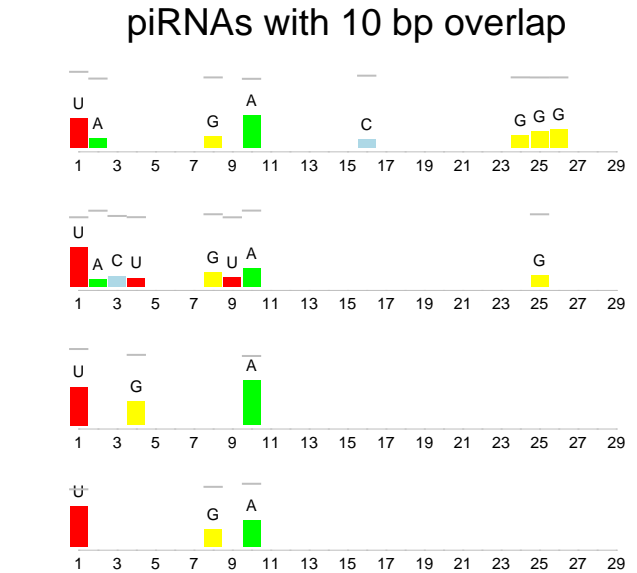
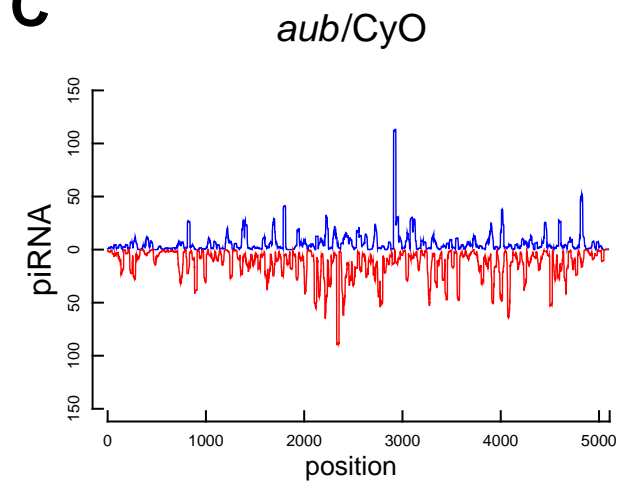
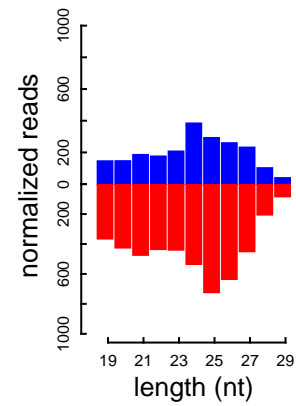
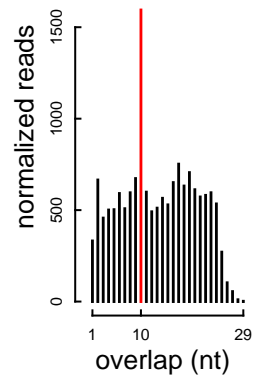
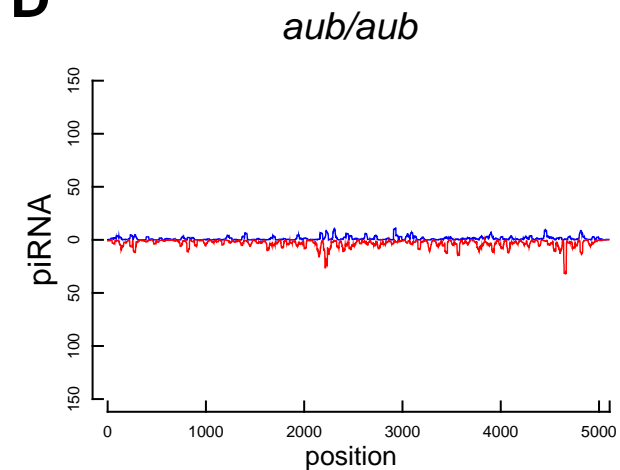
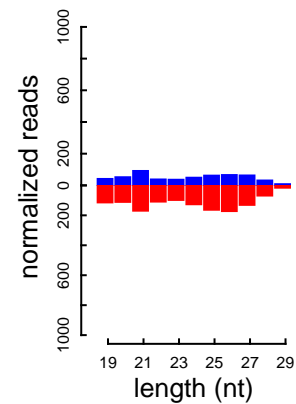
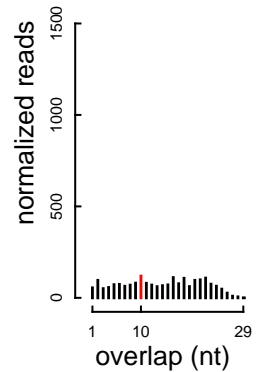
rooA

A**B****C****E****G****D****F****H**

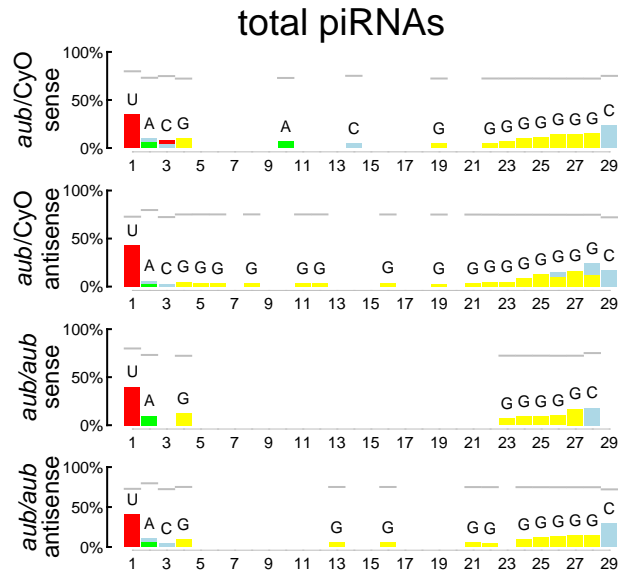
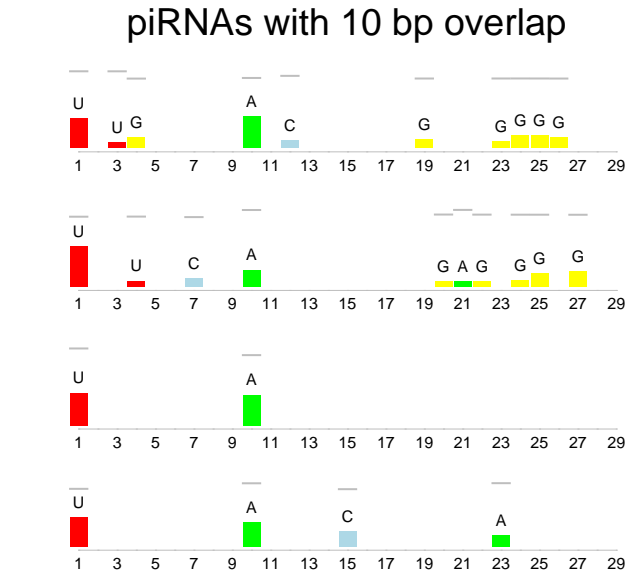
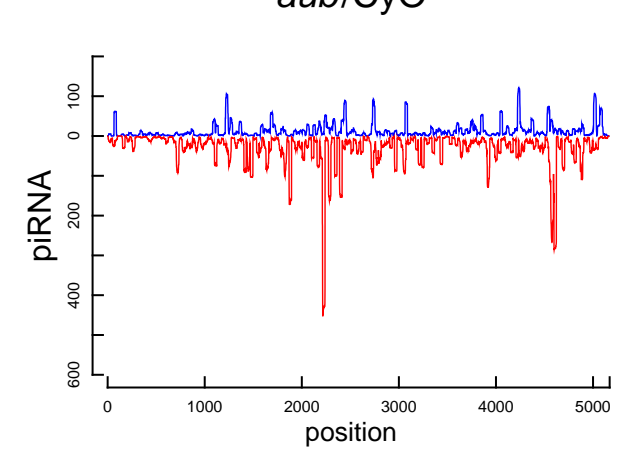
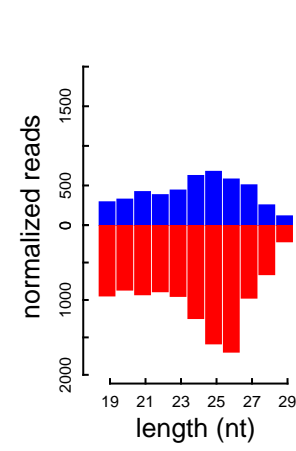
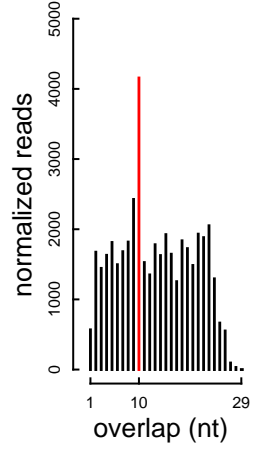
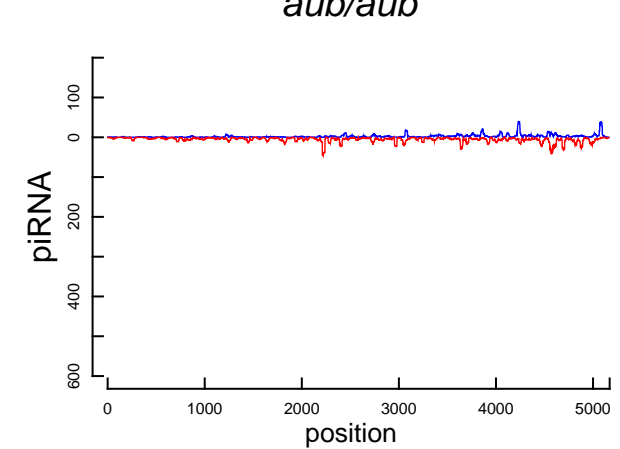
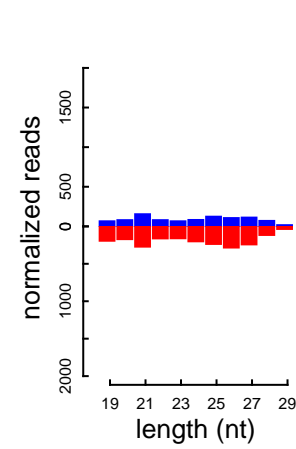
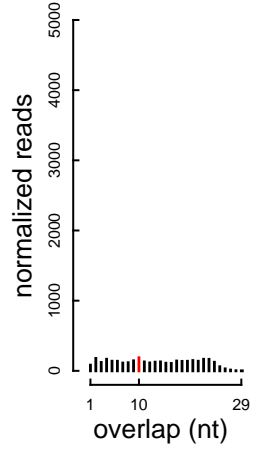
rover

A**B****C****E****G****D****F****H**

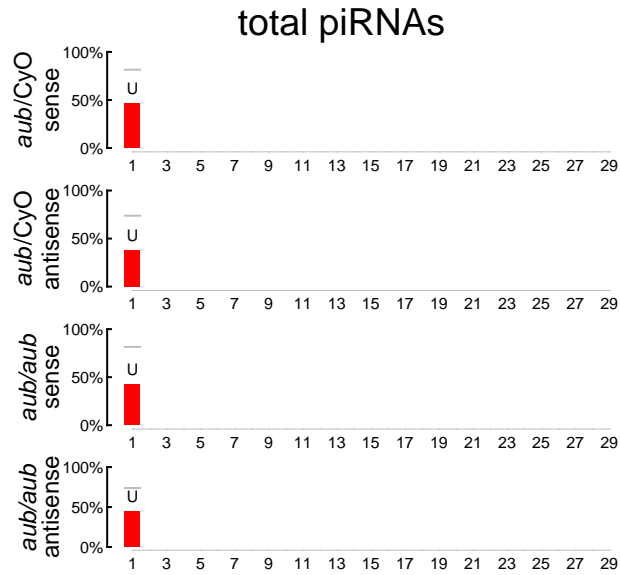
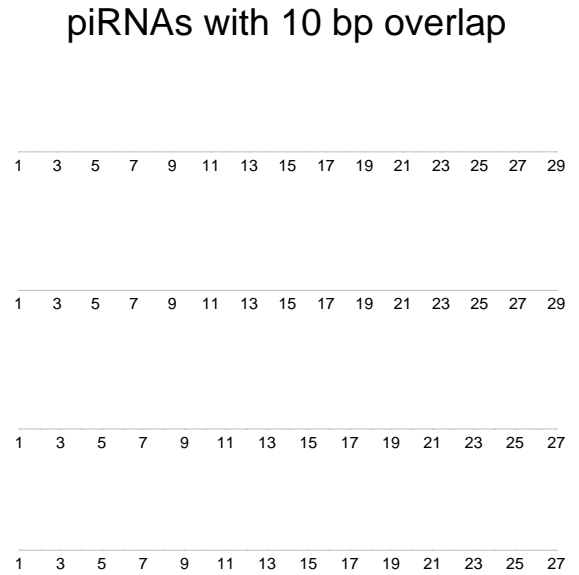
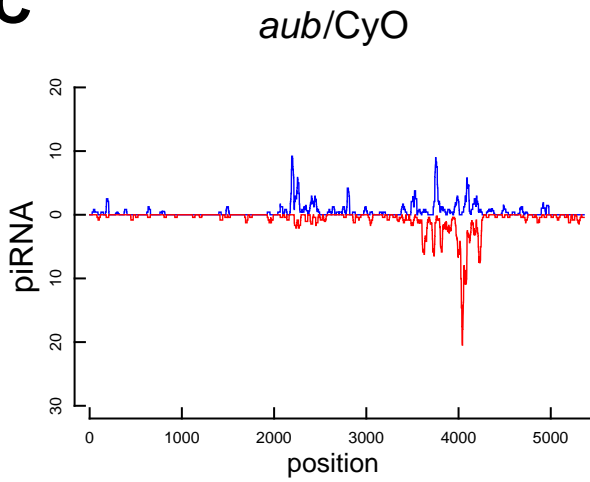
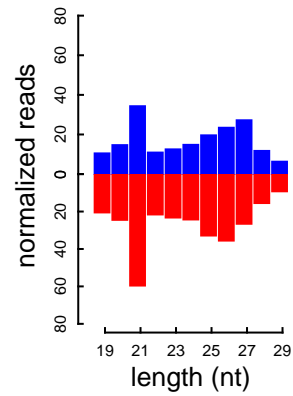
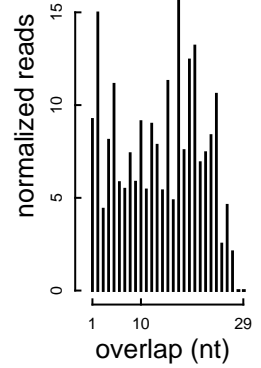
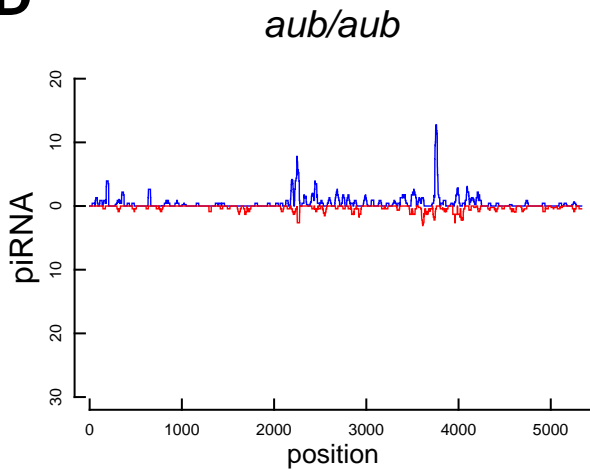
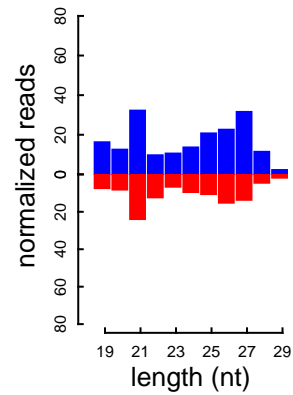
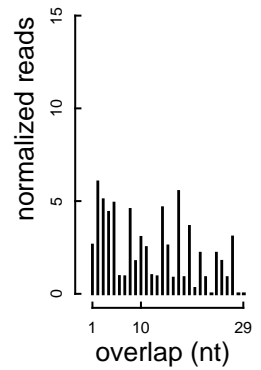
Rt1a

A**B****C****E****G****D****F****H**

Rt1b

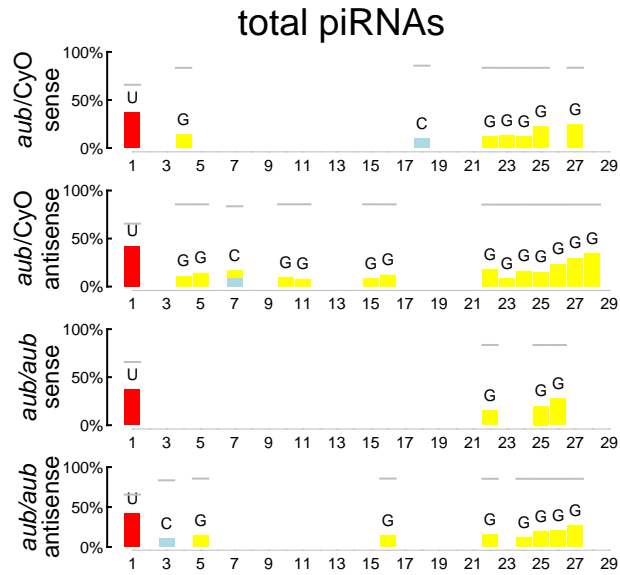
A**B****C****E****G****D****F****H**

Rt1c

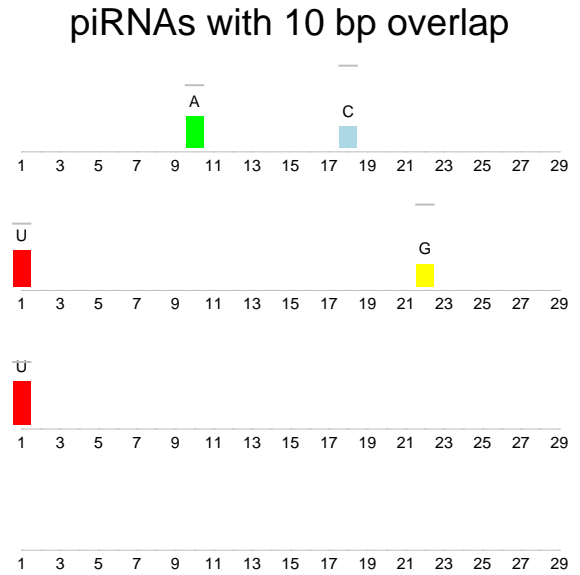
A**B****C****E****G****D****F****H**

S element

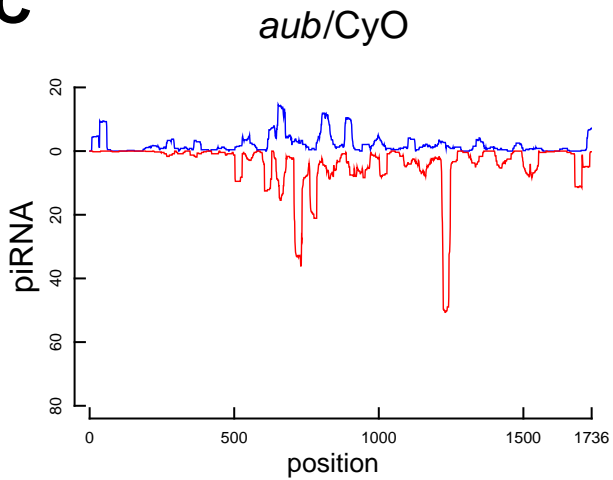
A



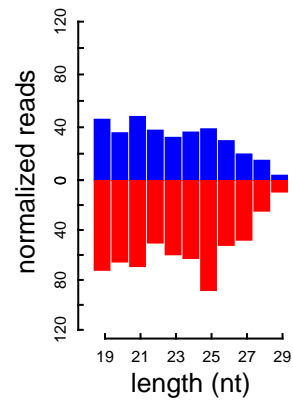
B



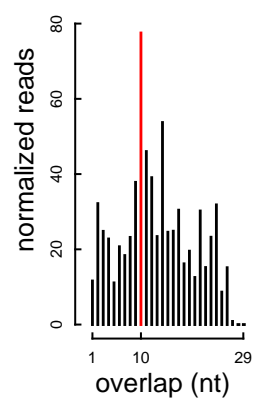
C



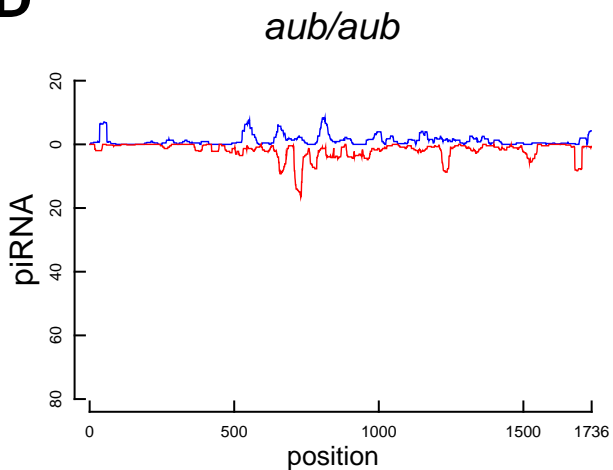
E



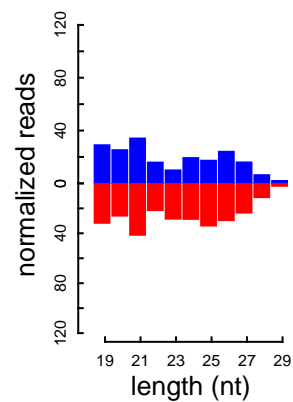
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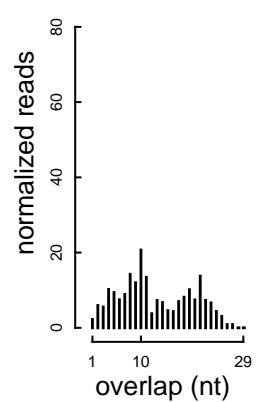
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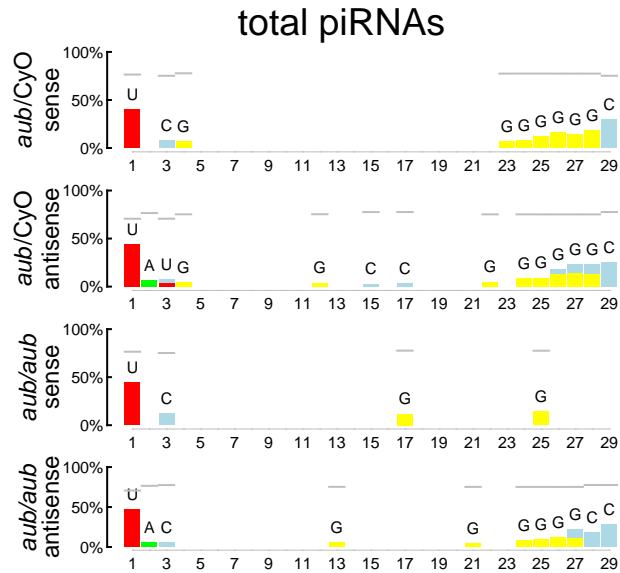
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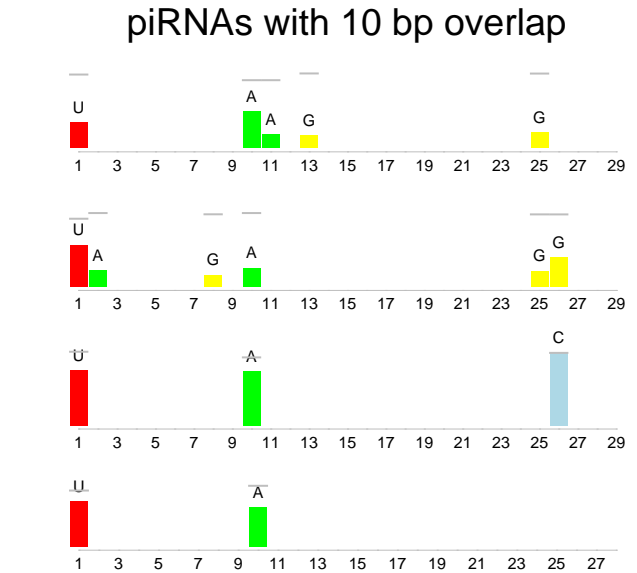
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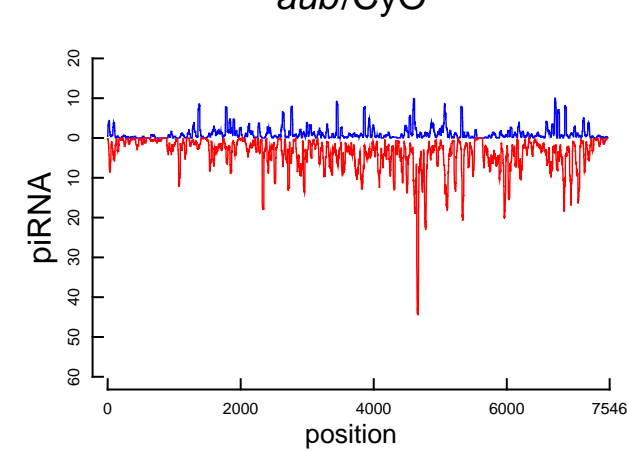
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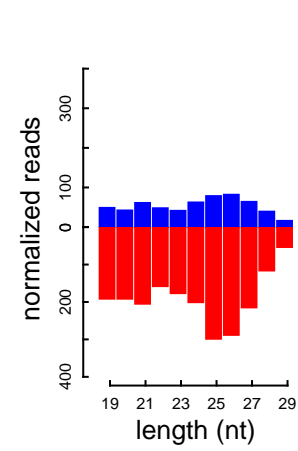
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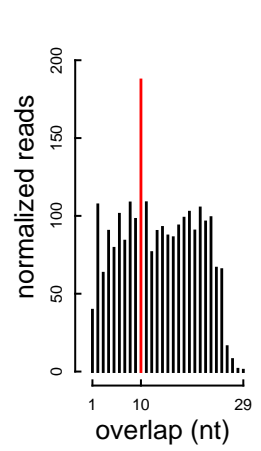
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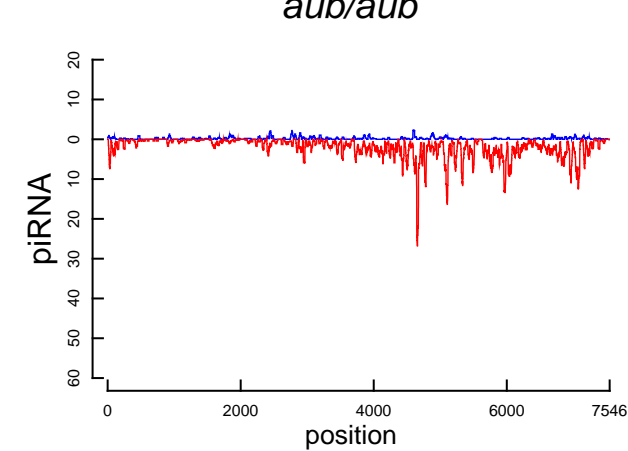
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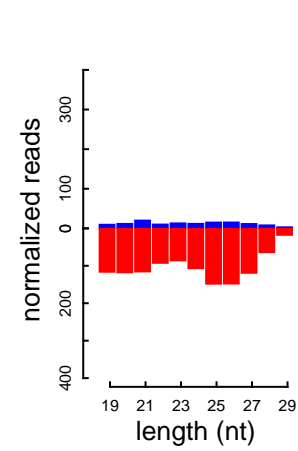
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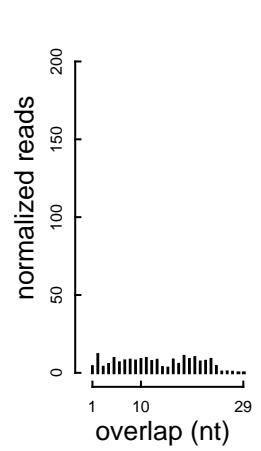
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F

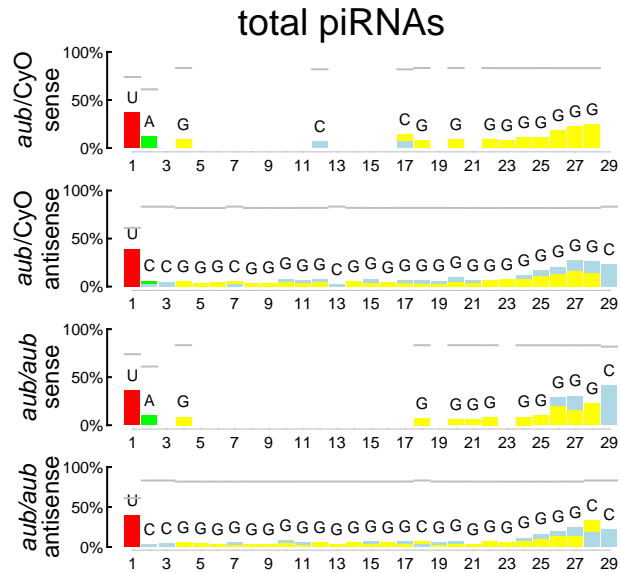


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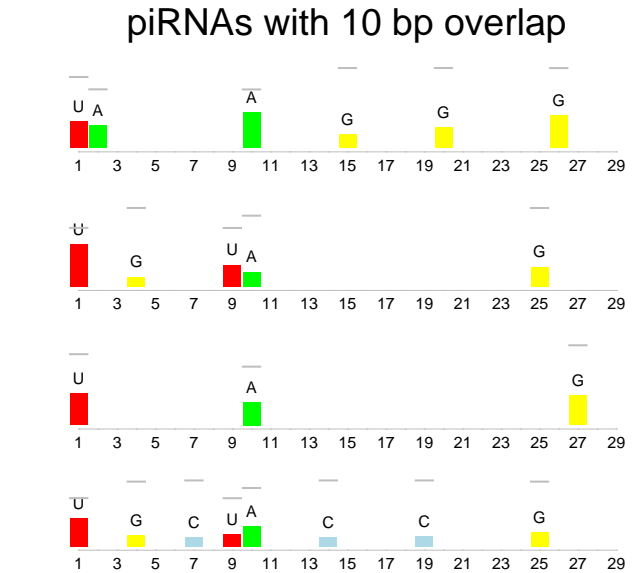


Stalker

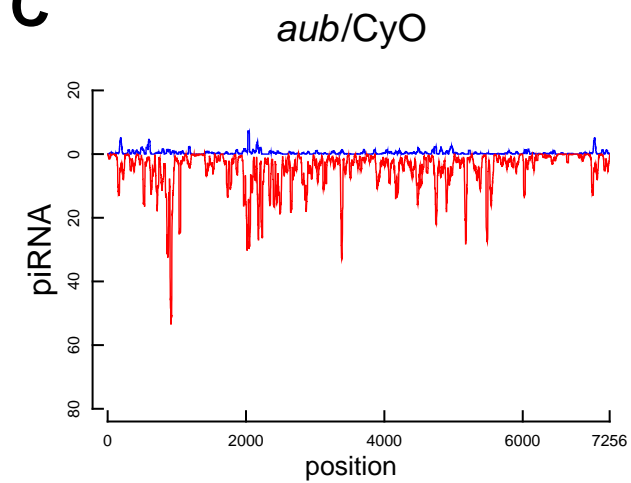
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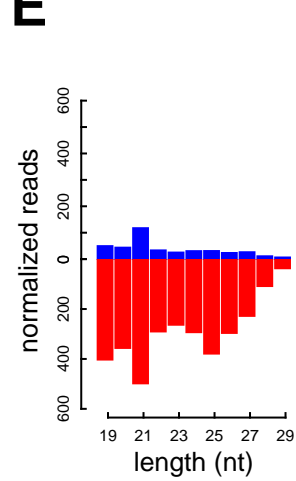
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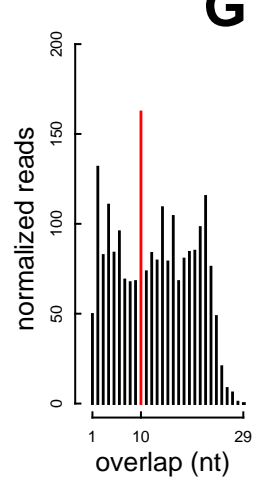
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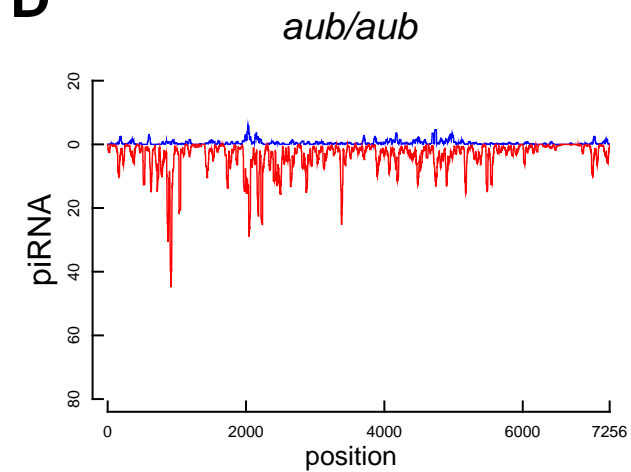
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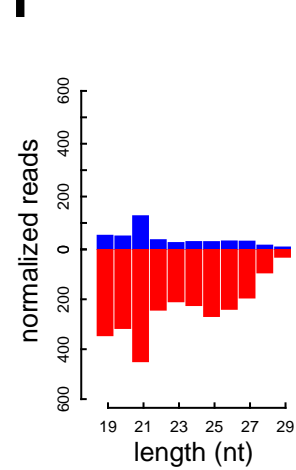
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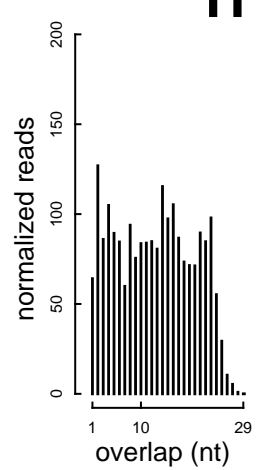
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F

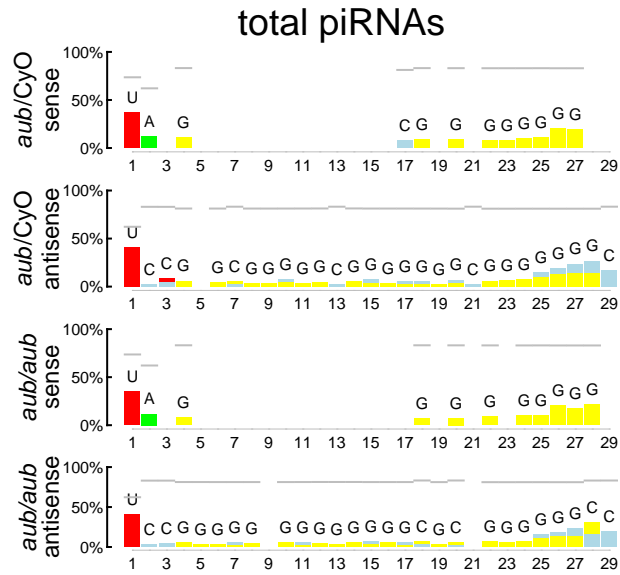


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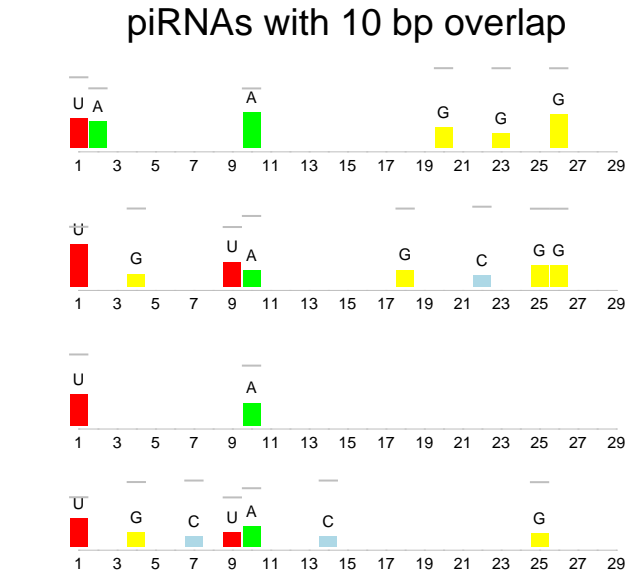


Stalker2

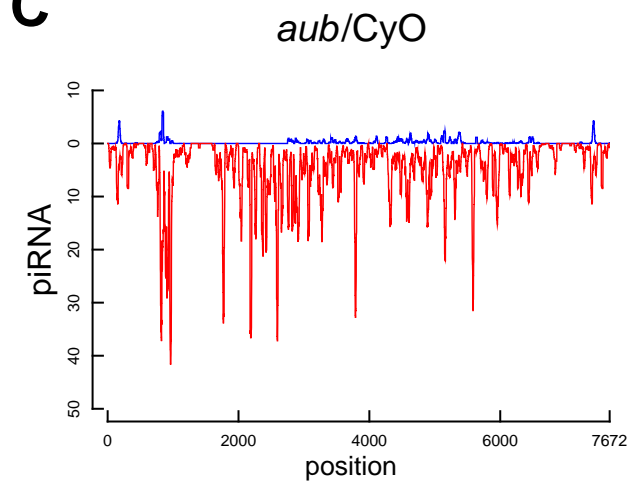
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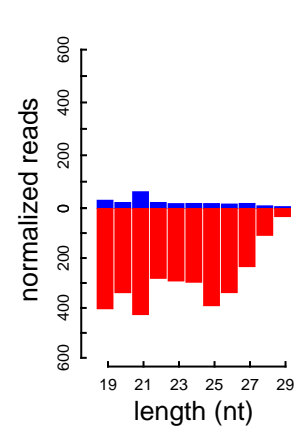
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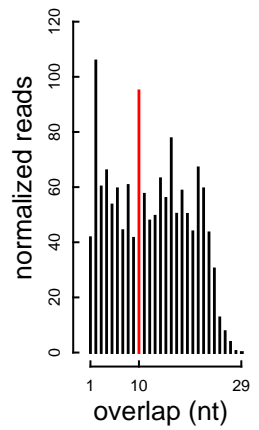
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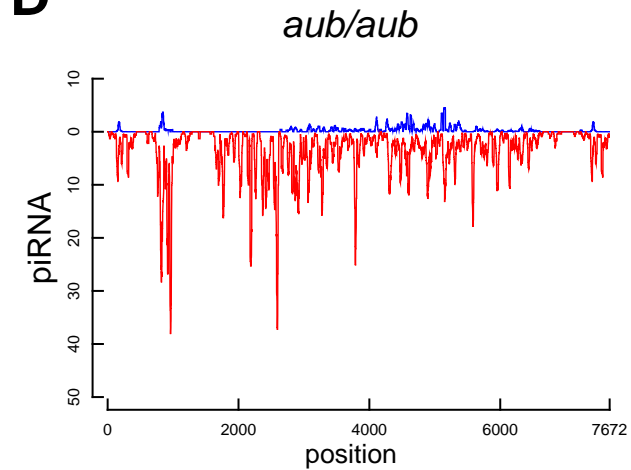
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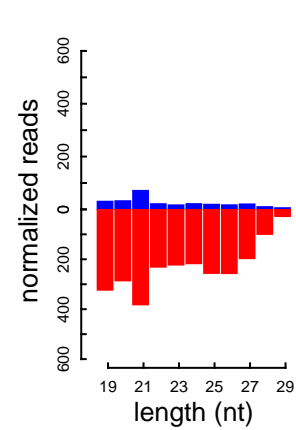
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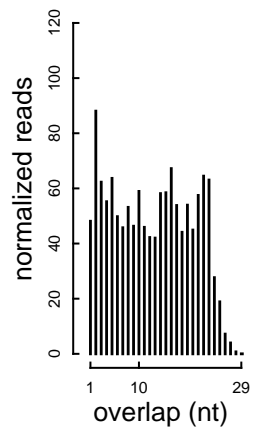
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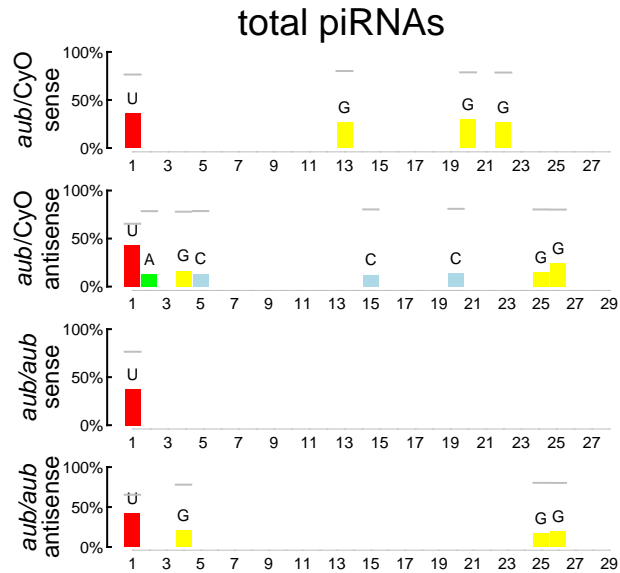
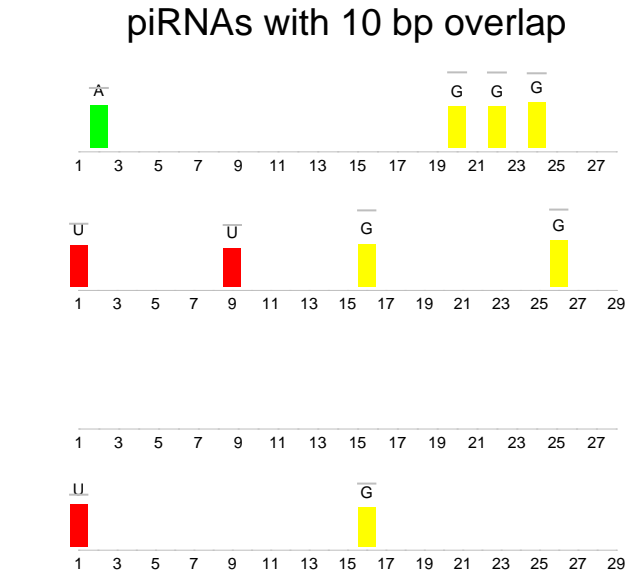
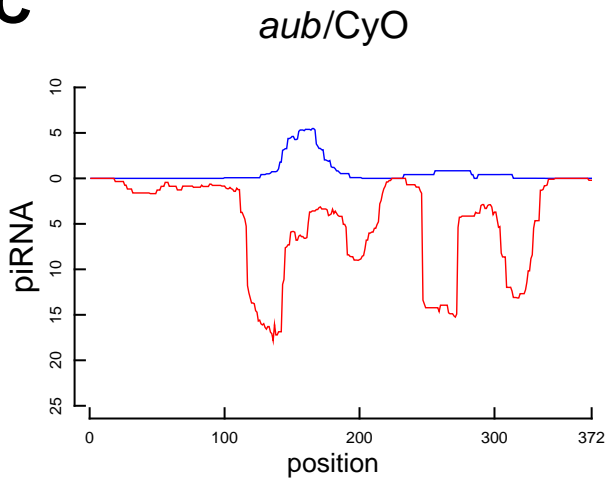
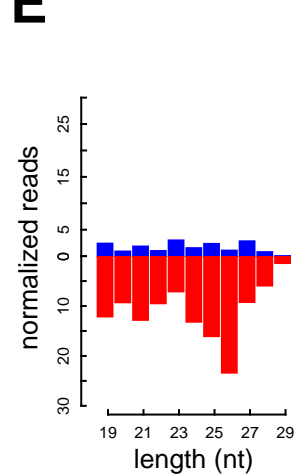
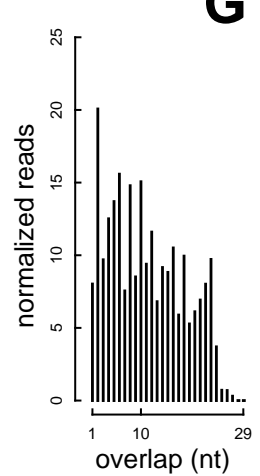
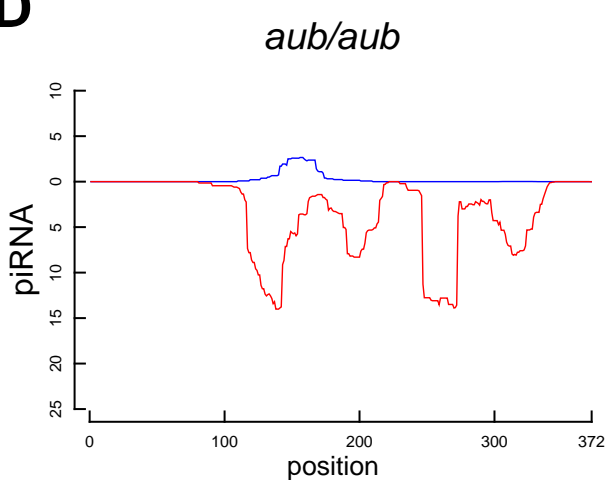
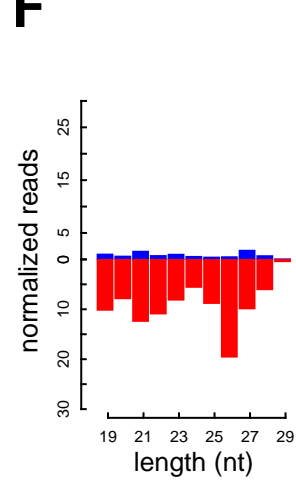
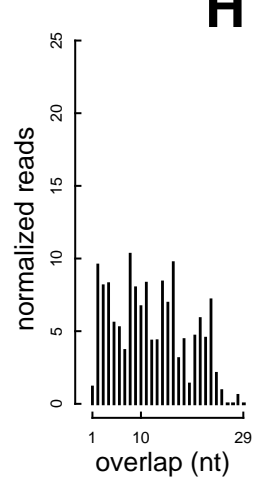
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H

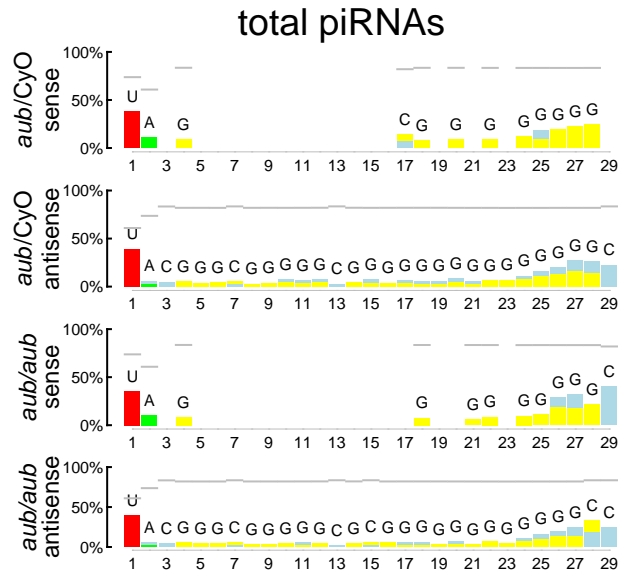


Stalker3

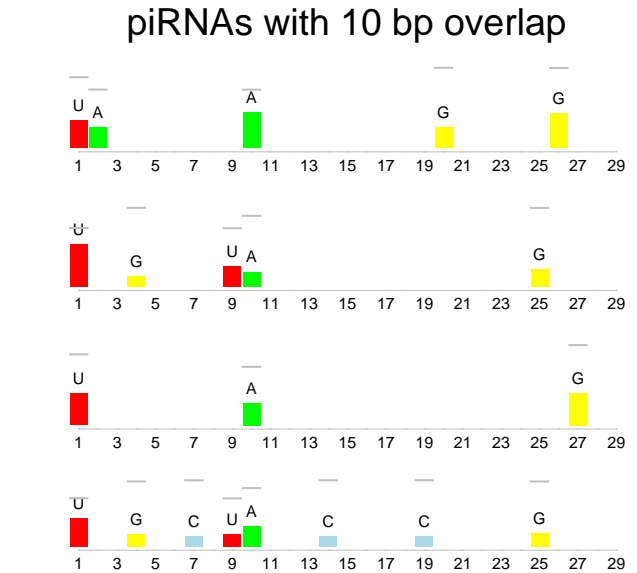
A**B****C****E****G****D****F****H**

Stalker4

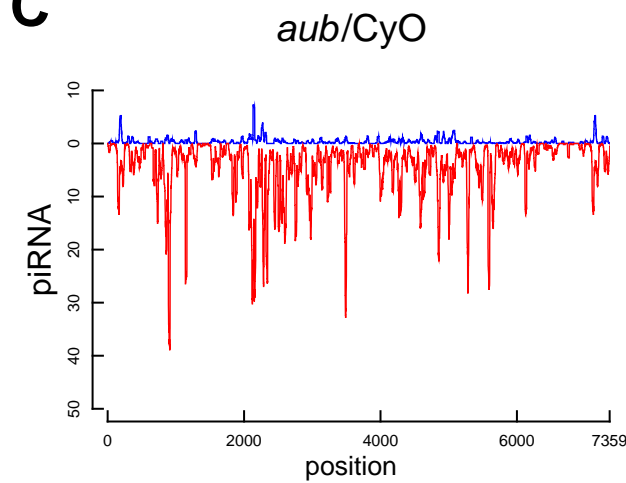
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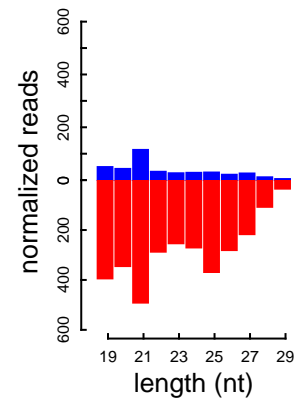
B



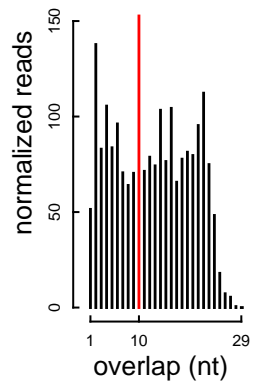
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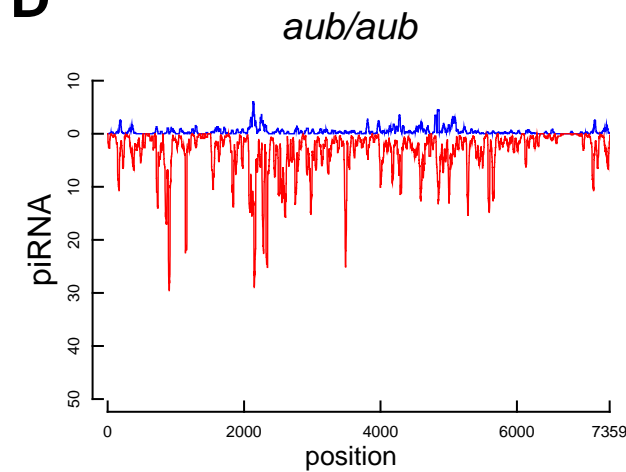
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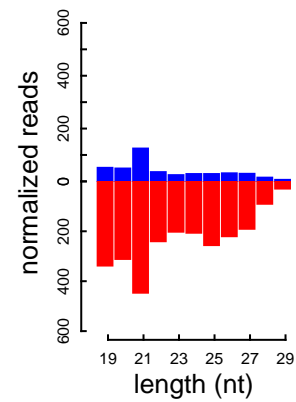
G



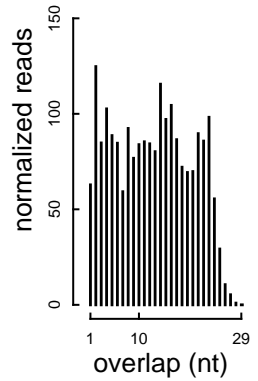
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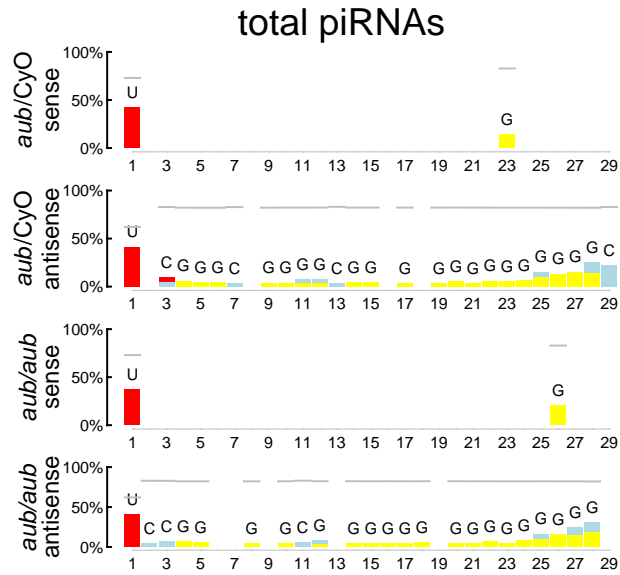
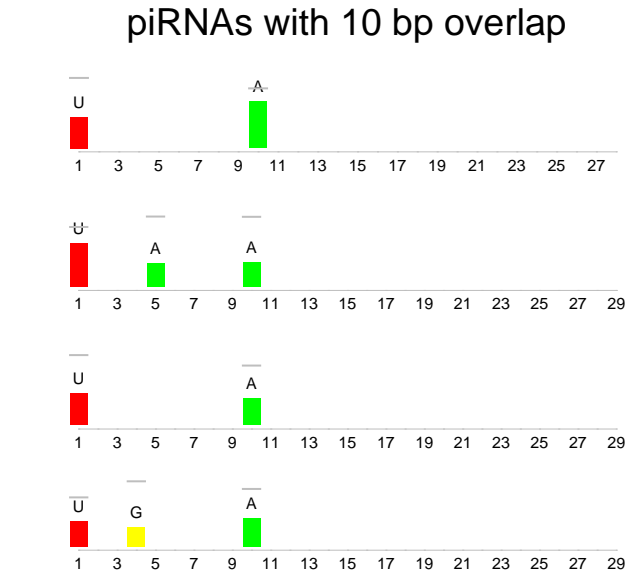
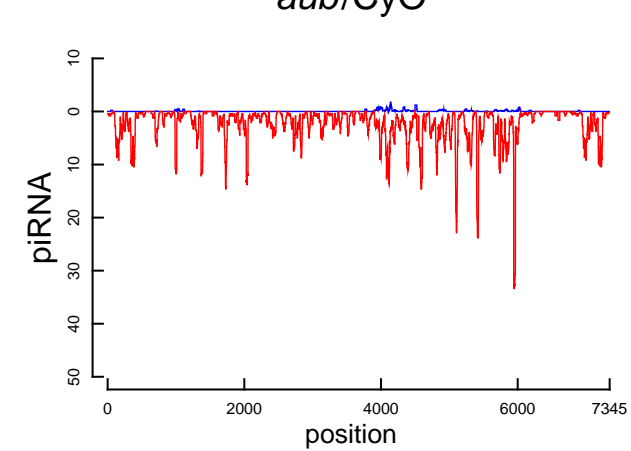
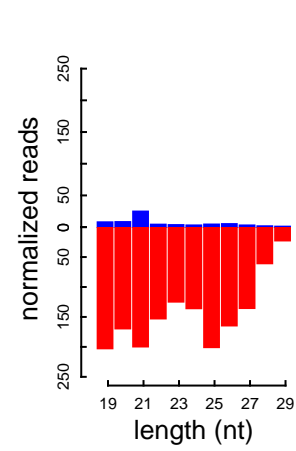
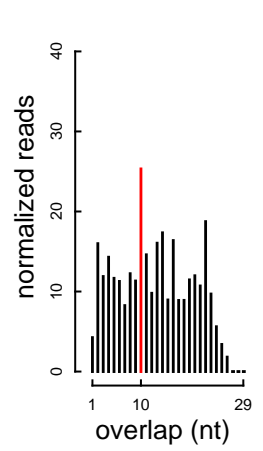
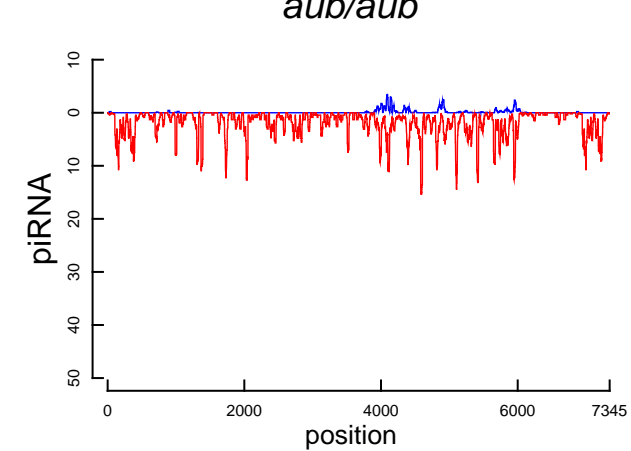
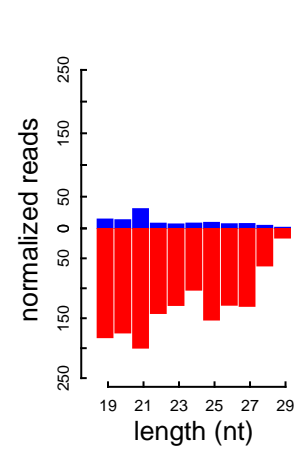
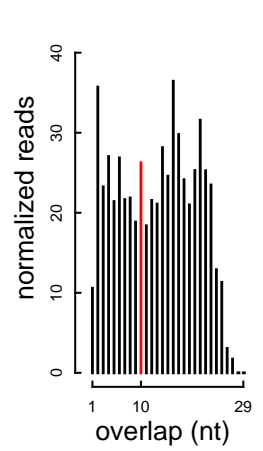
F



H

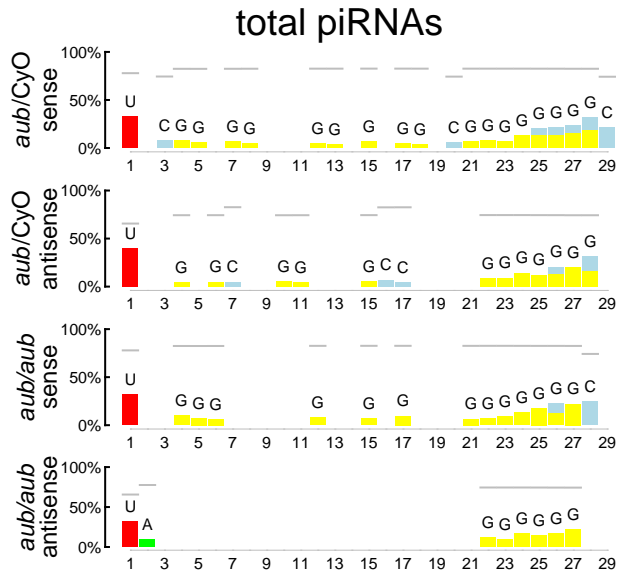


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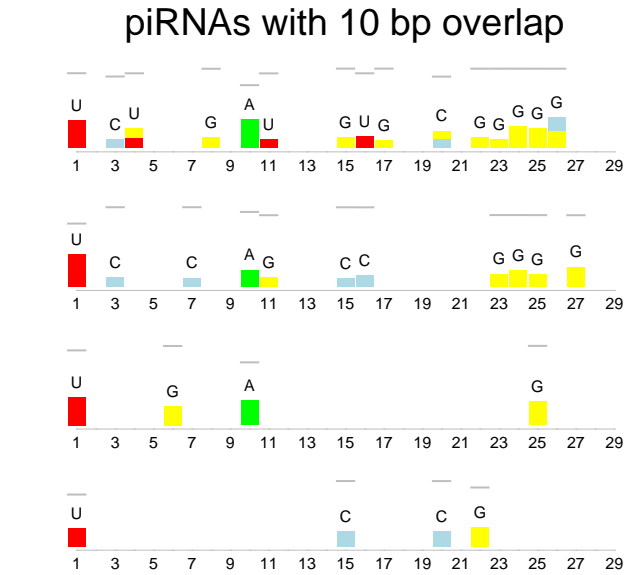
A**B****C****E****G****D****F****H**

TAHRE

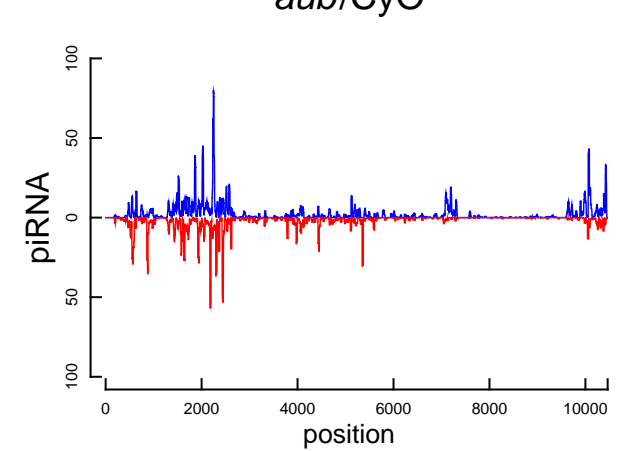
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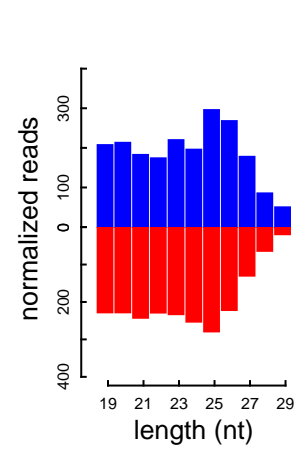
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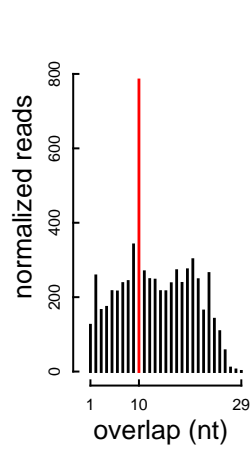
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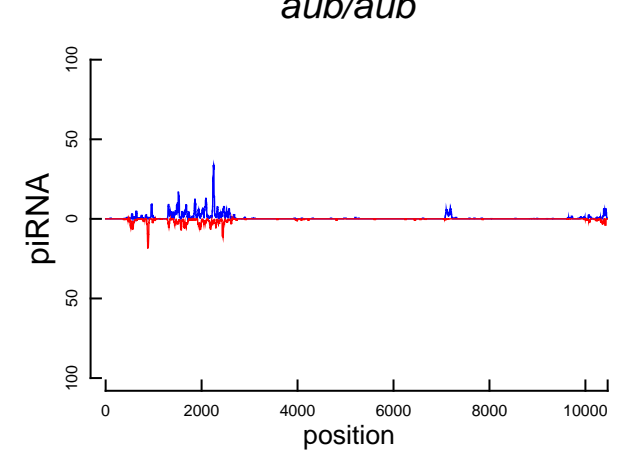
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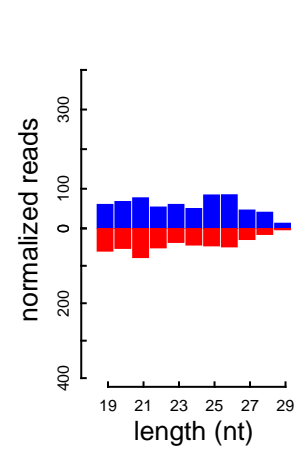
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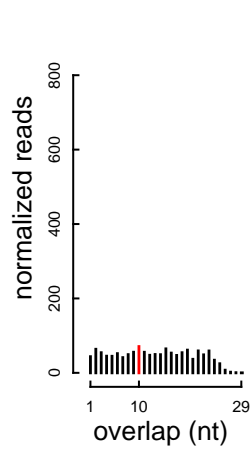
D



F

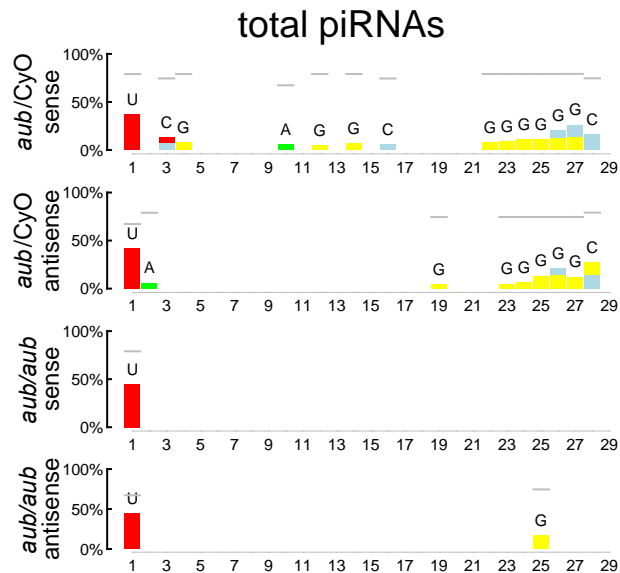


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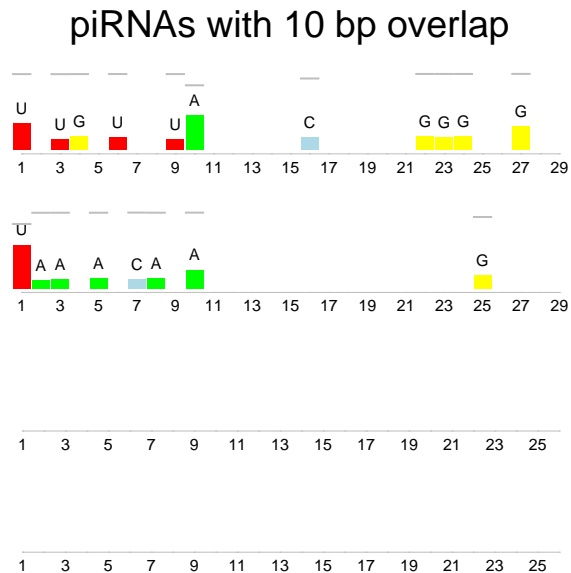


TART A, B and C

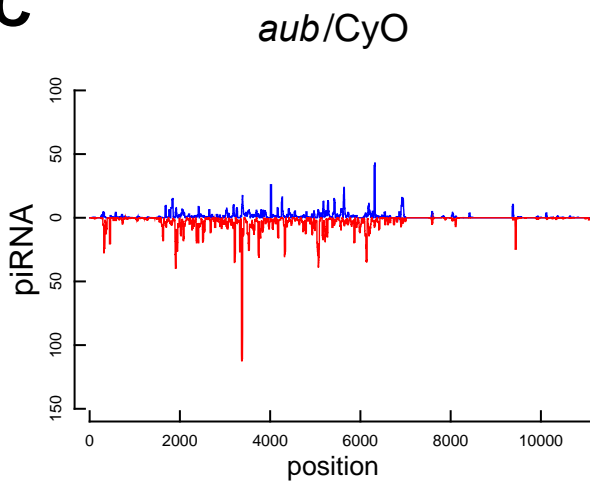
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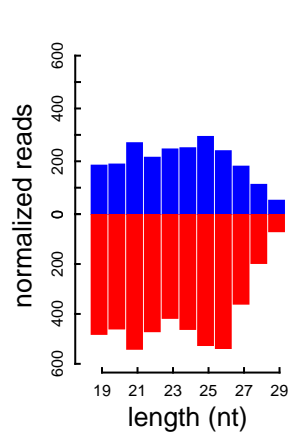
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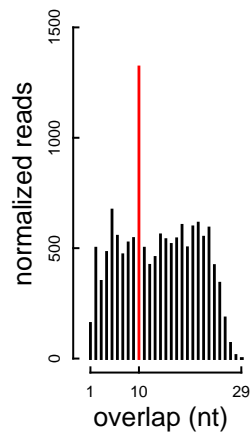
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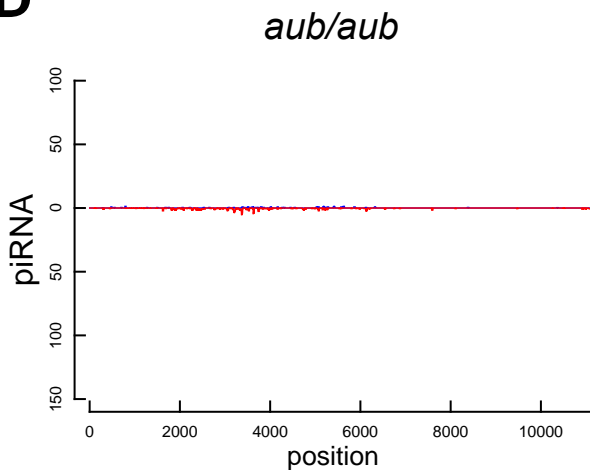
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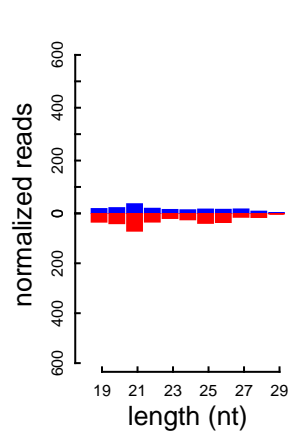
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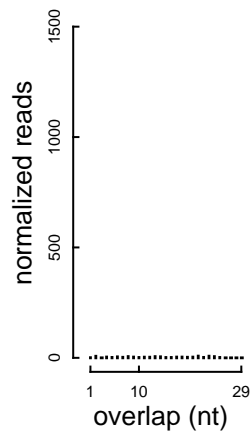
D



F

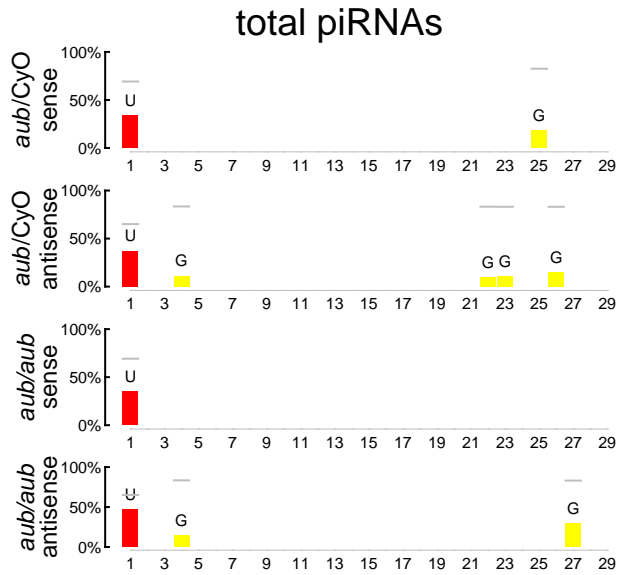


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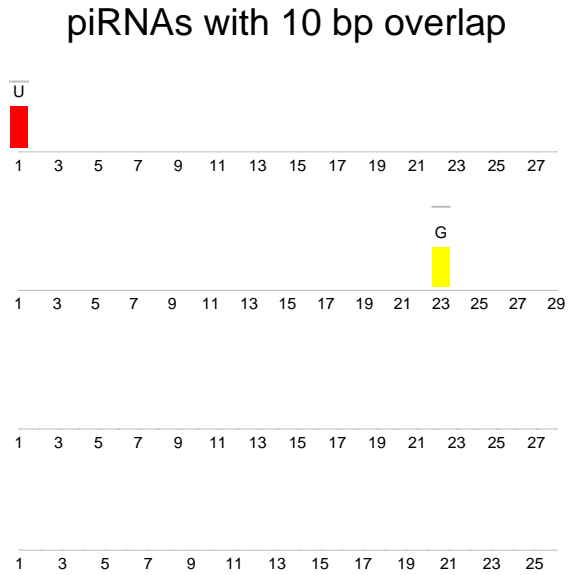


transib2

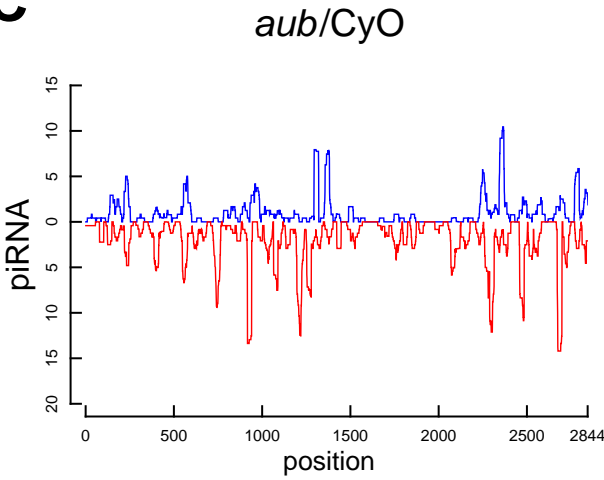
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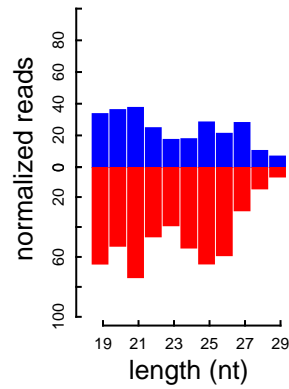
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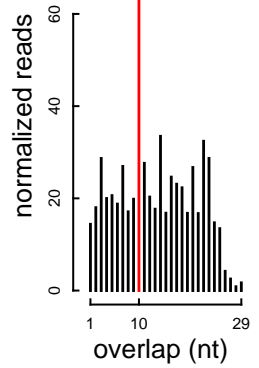
C



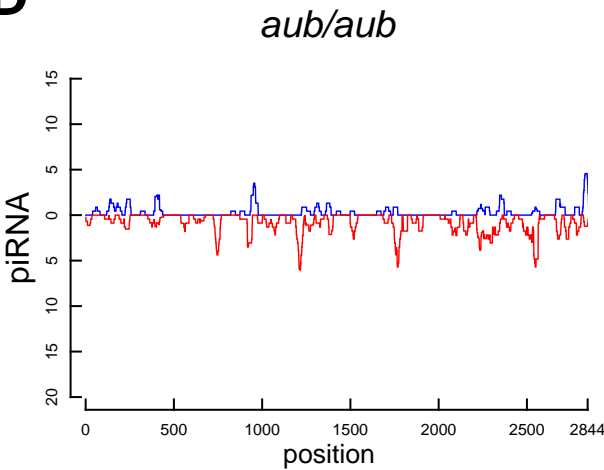
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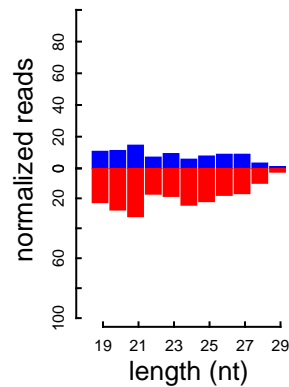
G



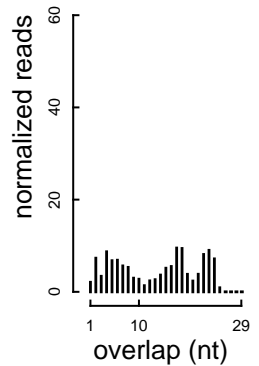
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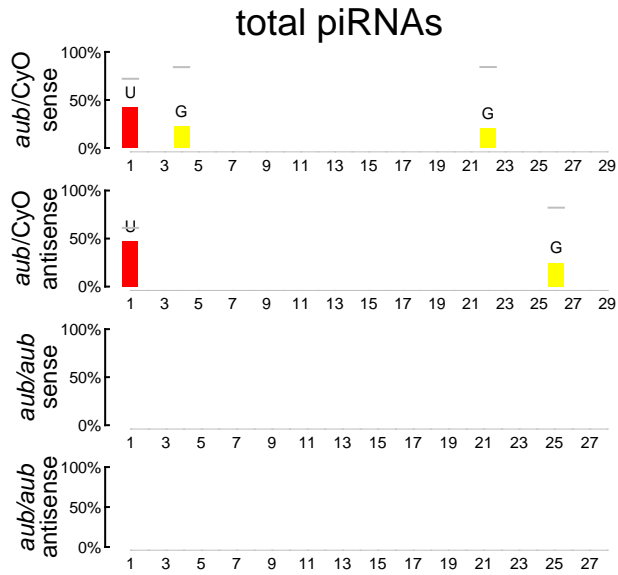
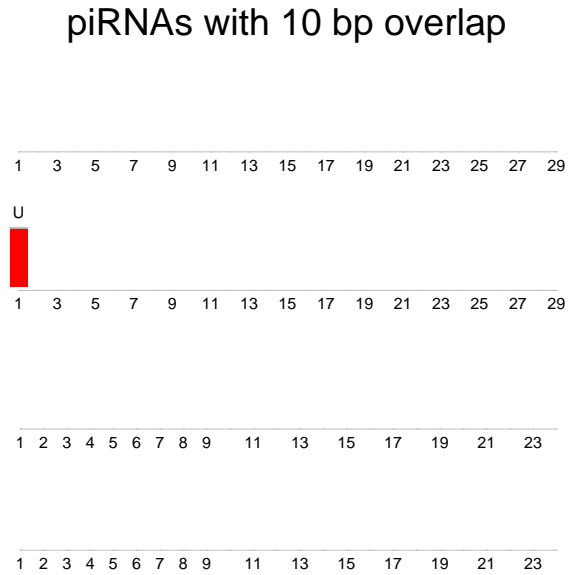
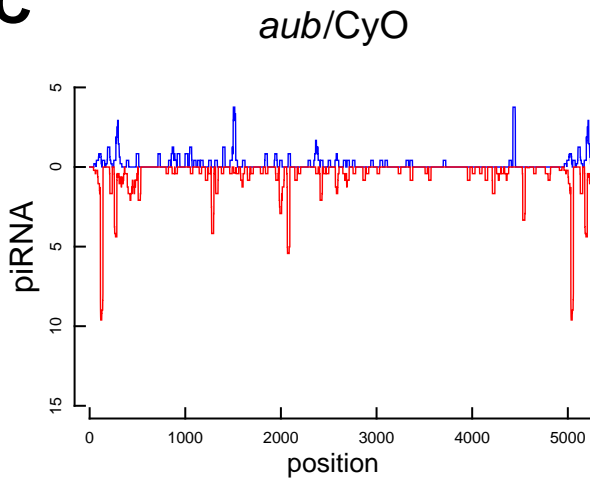
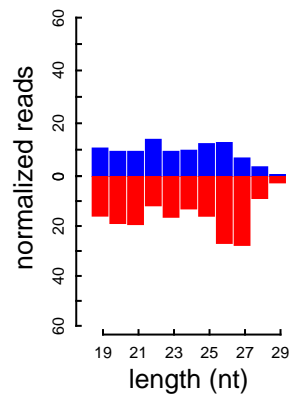
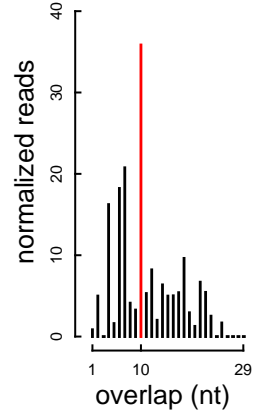
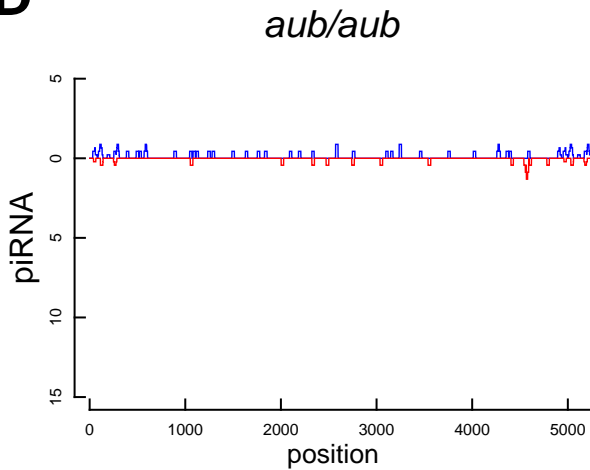
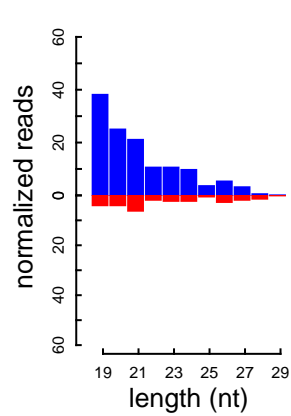
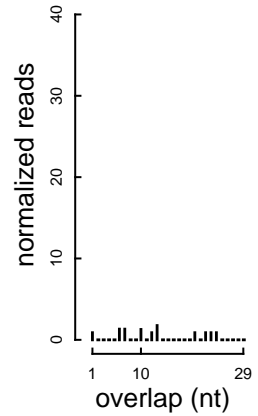
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H

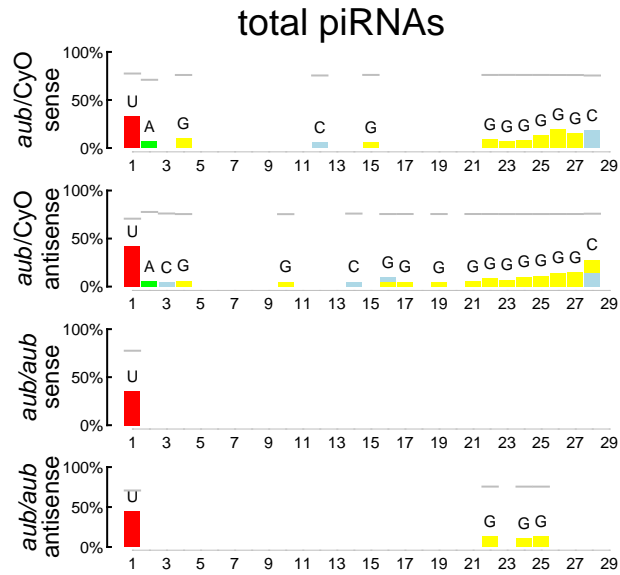


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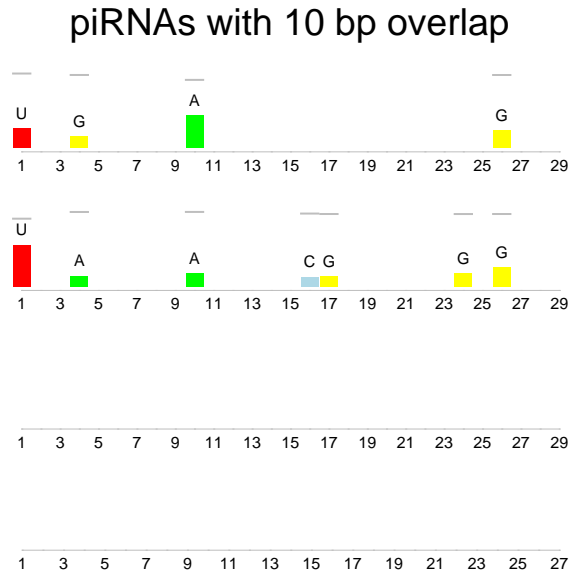
A**B****C****E****G****D****F****H**

X element

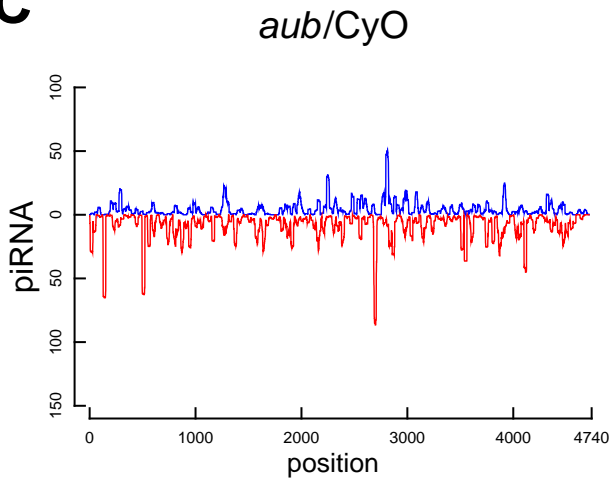
A



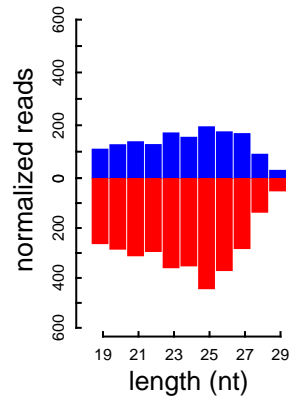
B



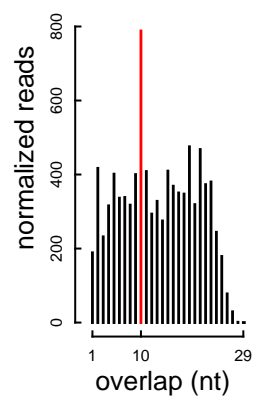
C



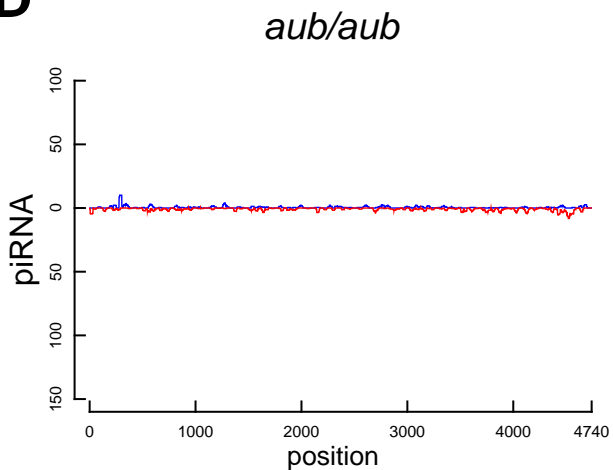
E



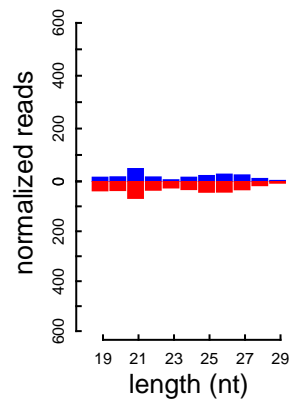
G



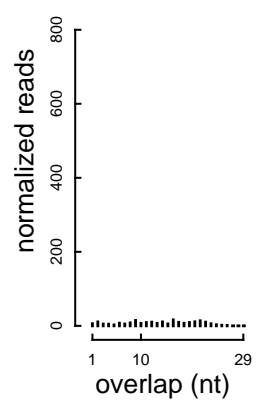
D



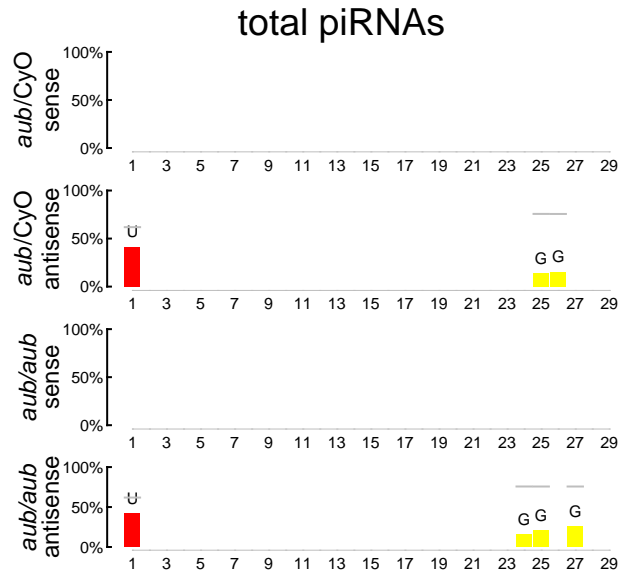
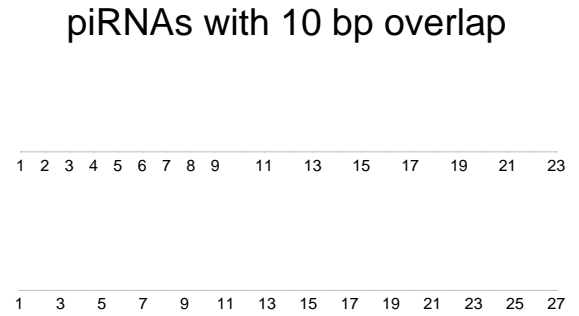
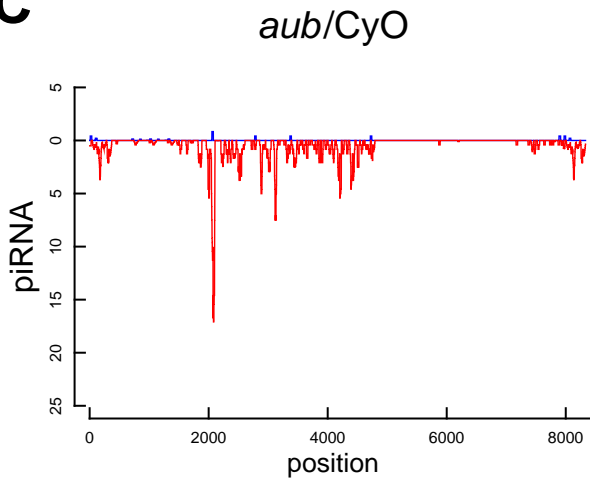
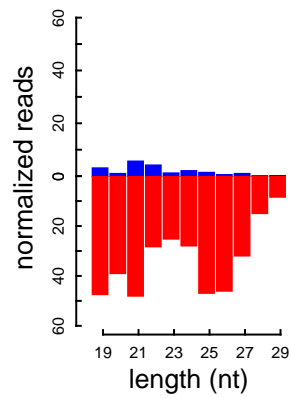
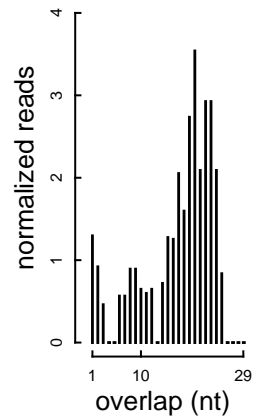
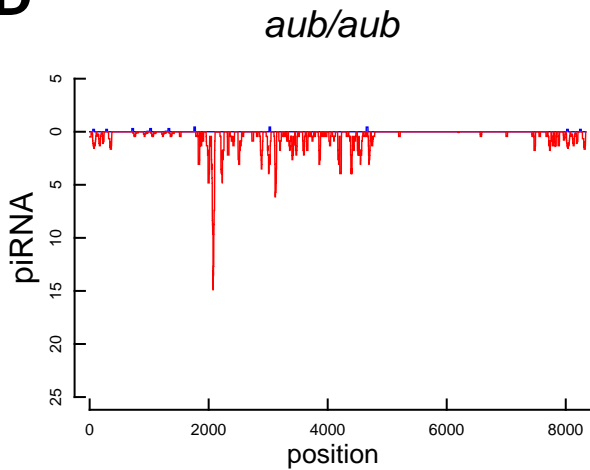
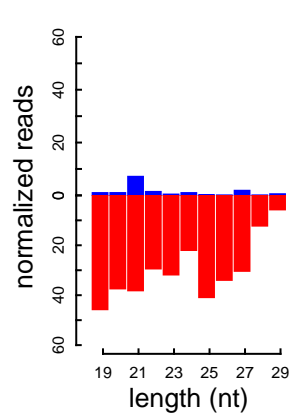
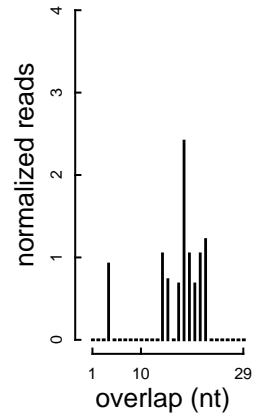
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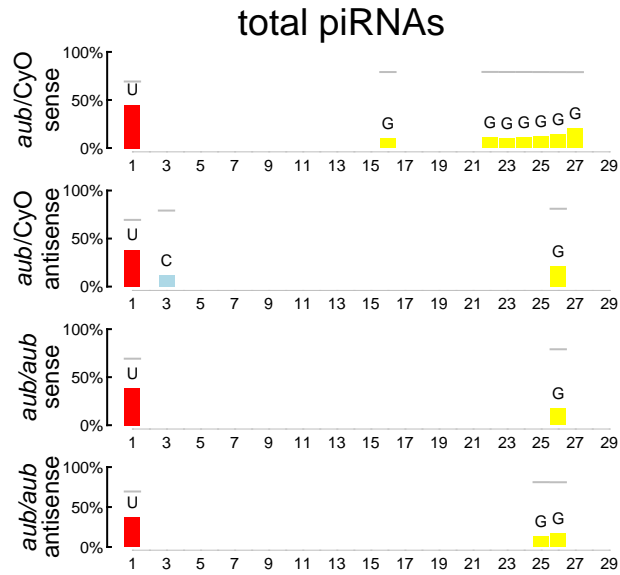
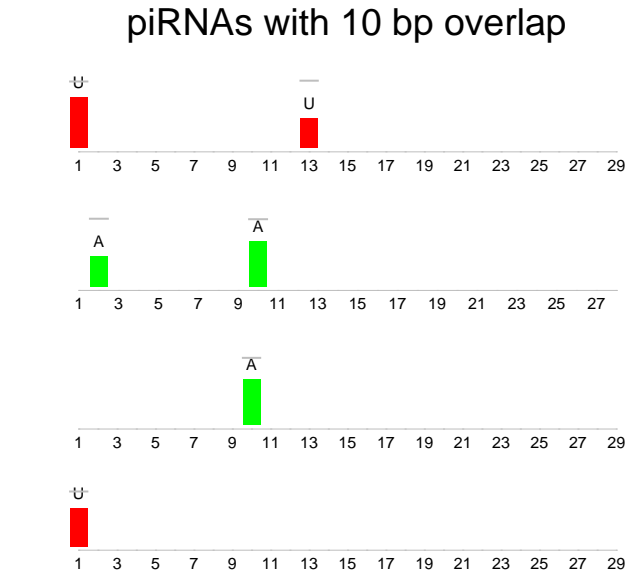
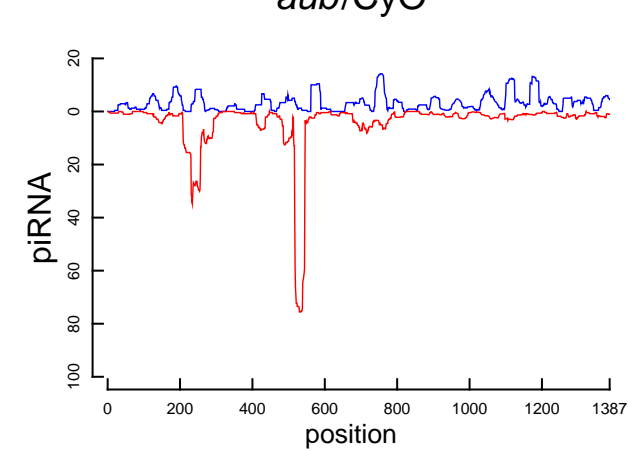
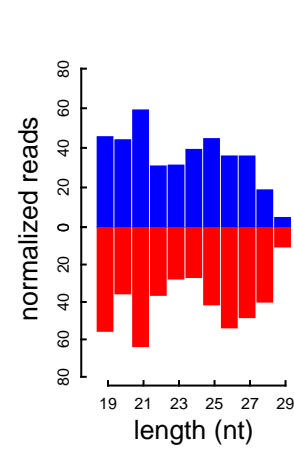
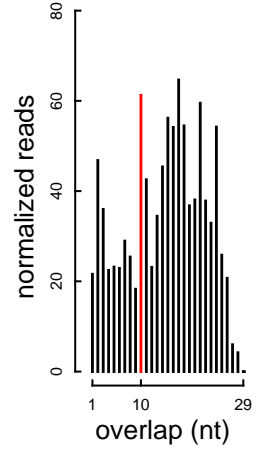
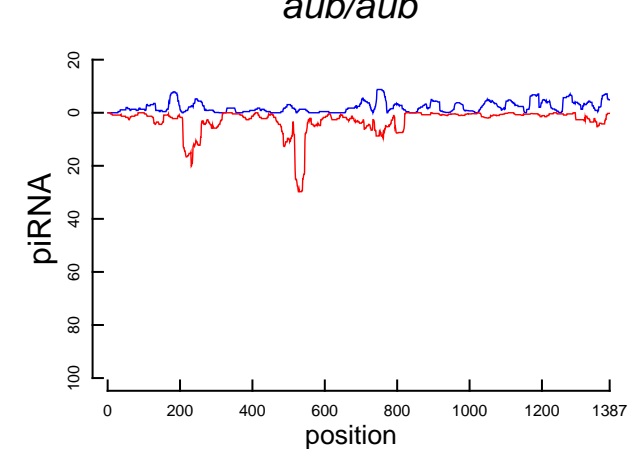
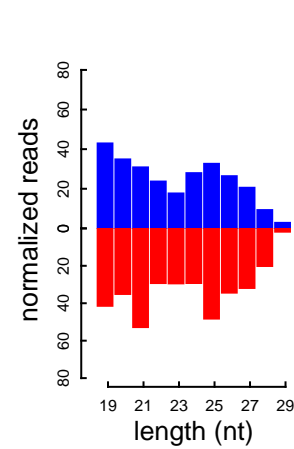
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A**B****C****E****G****D****F****H**

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A**B****C****E****G****D****F****H**