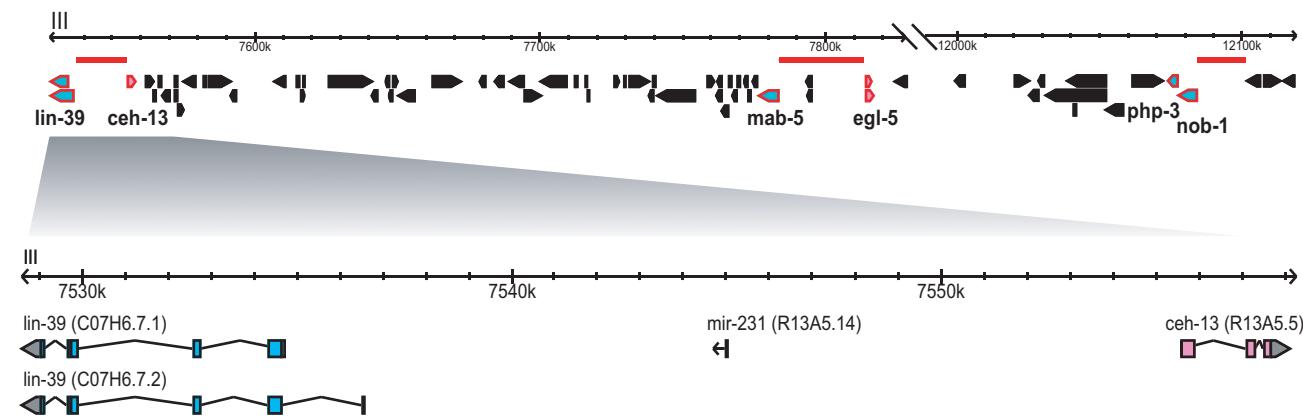
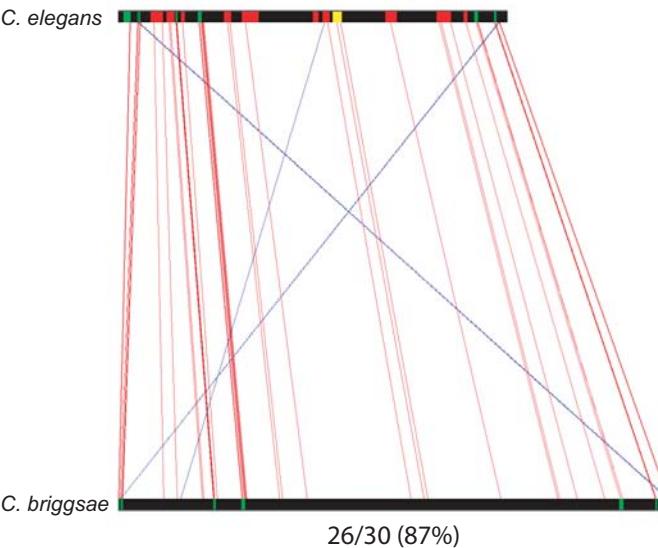
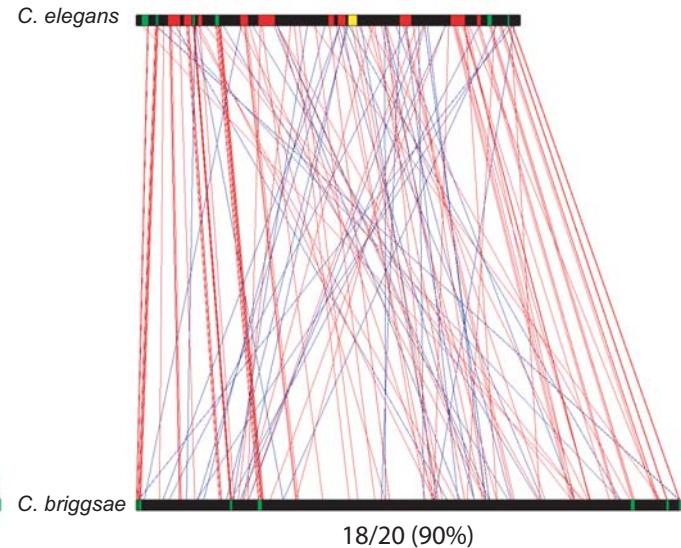
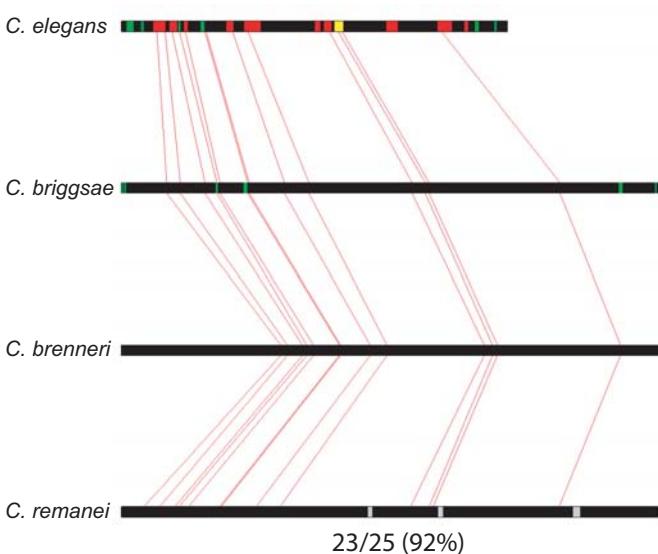
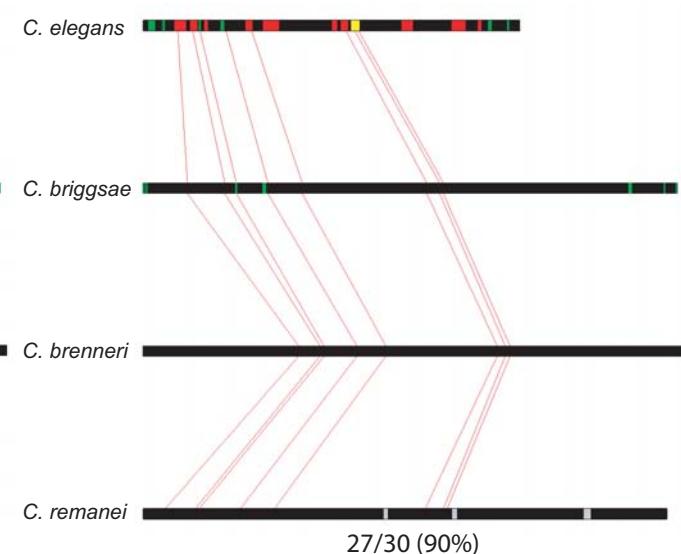
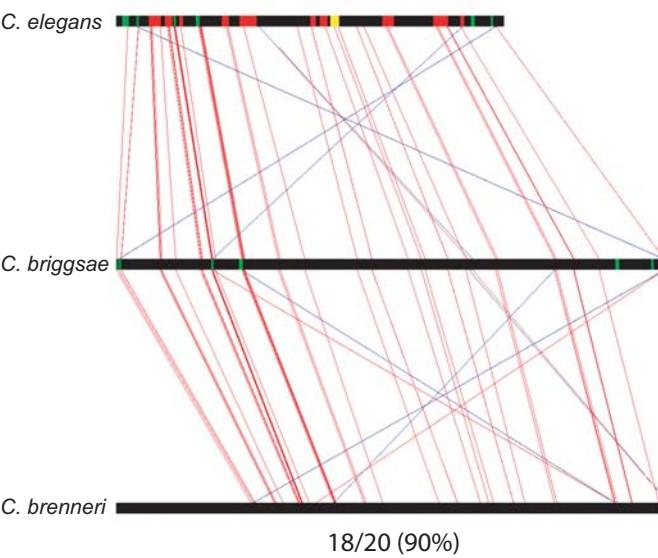
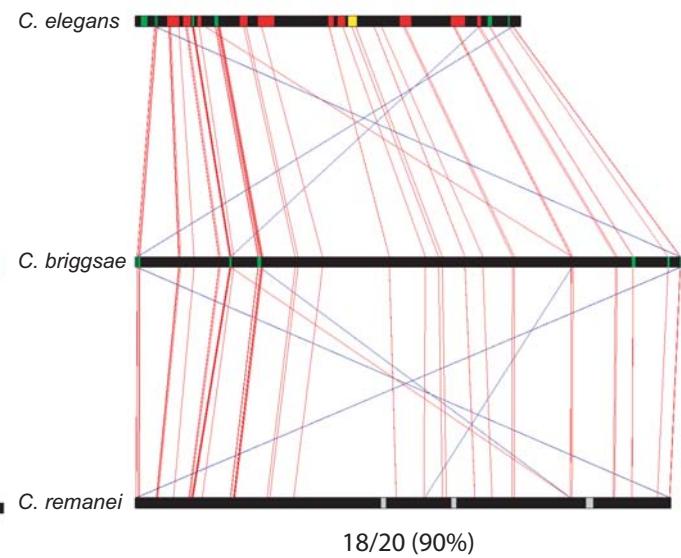


S1



S2A**B****C****D****E****F**

S2G*C. elegans**C. briggsae**C. brenneri**C. remanei*

18/20 (90%)

*C. elegans**C. briggsae**C. brenneri**C. remanei**C. sp. 3
PS1010*

18/20 (90%)

K*C. elegans**C. briggsae**C. brenneri**C. sp. 3
PS1010*

17/20 (85%)

H*C. elegans**C. briggsae**C. brenneri**C. sp. 3
PS1010*

18/20 (90%)

J*C. elegans**C. briggsae**C. brenneri**C. remanei*

17/20 (85%)

L*C. elegans**C. briggsae**C. brenneri**C. sp. 3
PS1010*

17/20 (85%)

S3A

C. elegans AAGATTAAATGGCACCCATAAAATCTCAACT
C. briggsae GAGTTTAAATGGCACCCATAAAATCTCAACT
C. brenneri AAGAGTTAAATGGCACCCATAAAATCTCAACT
C. remanei AAGAGTTAAATGGCACCCATAAAATCTCAACT
 Human GATTGTTTATTACAGGCCATAAAATCTTGAG
 Dog GATTGTTTATTACAGGCCATAAAATCTTGAG
 Mouse GATTGTTTATTACAGGCCATAAAATCTTGAG
 Opossum GGTTGTTTATTACAGGCCATAAAATCTCGCTC
 Platypus GATTGTTTATTACAGGCCATAAAATCTTGAG
 Frog AAGCGTATATTTCACCCATAAAACTCAACC

C

C. elegans
C. briggsae
C. brenneri
C. remanei
 Human
 Dog
 Mouse
 Opossum
 Platypus
 Frog

E

C. elegans
C. briggsae
C. brenneri
C. remanei
D. melanogaster
D. simulans
D. virilis
D. sechellia
D. pseudoobscura
D. ananassae

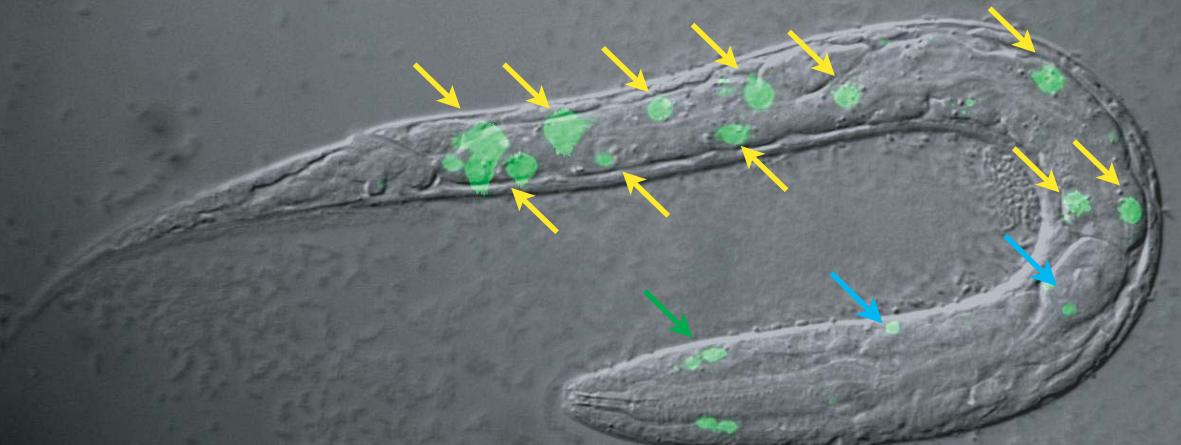
B

C. elegans
C. briggsae
C. brenneri
C. remanei
 Human
 Zebrafish
 Lancelet
 Trematode
 Leech

D

C. elegans
C. briggsae
C. brenneri
C. remanei
 Human
 Dog
 Mouse
 Opossum
 Platypus
 Frog

S4A

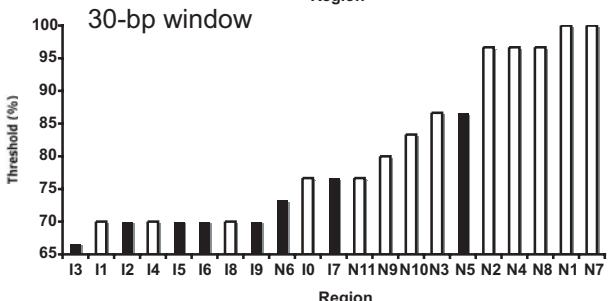
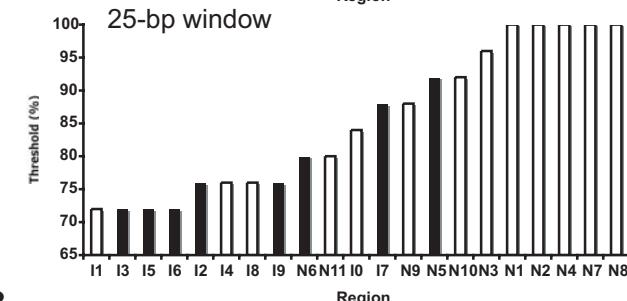
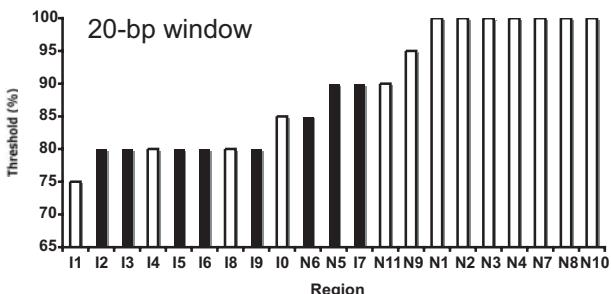
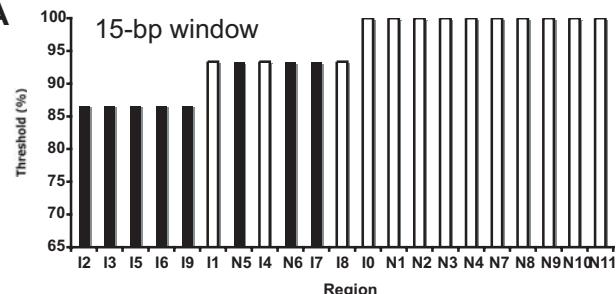
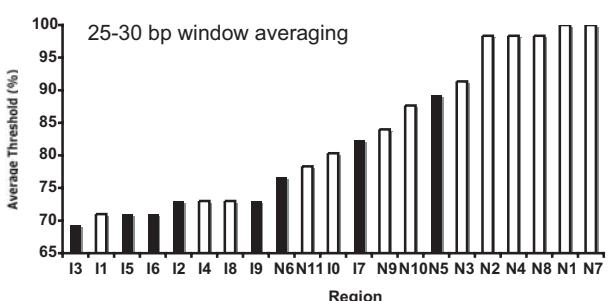
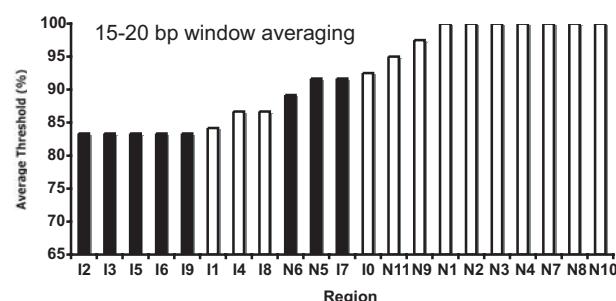
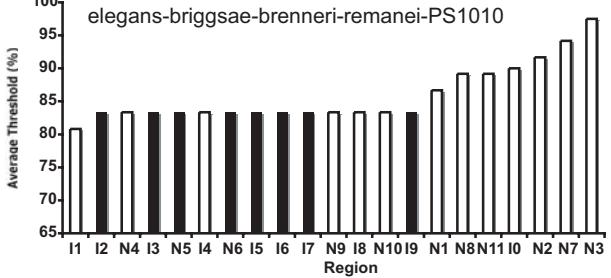
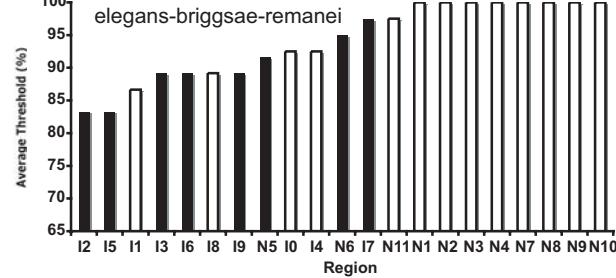
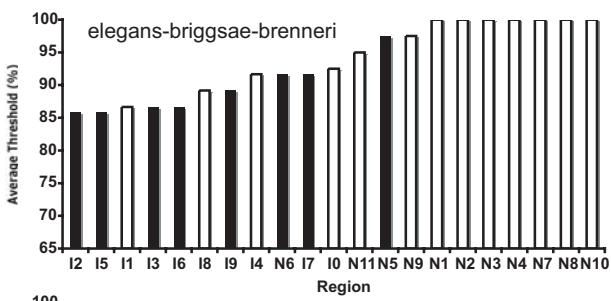
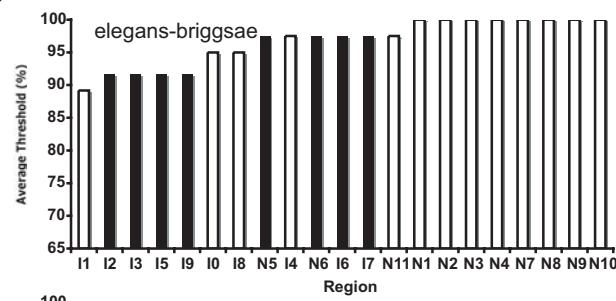


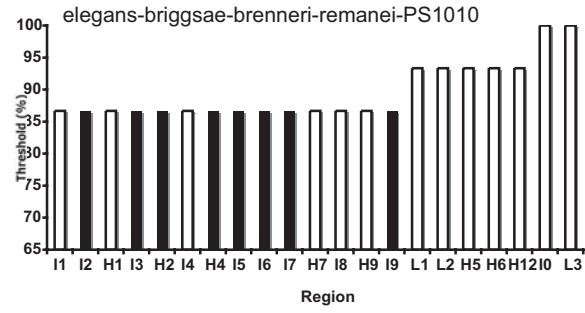
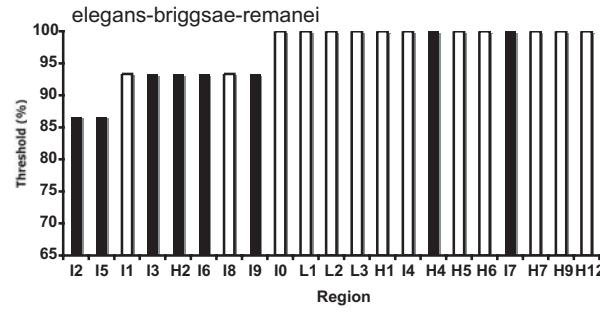
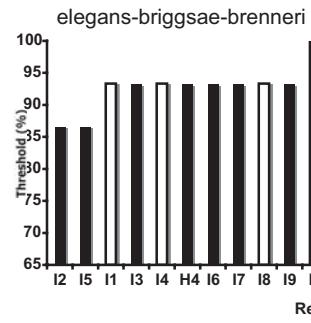
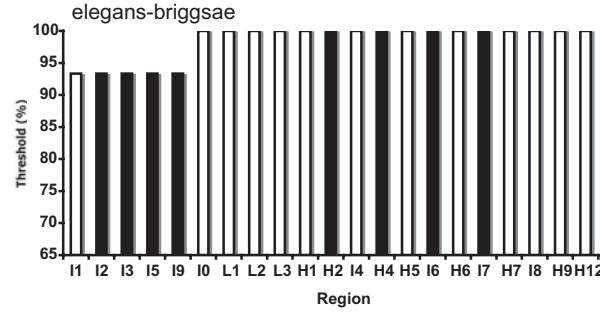
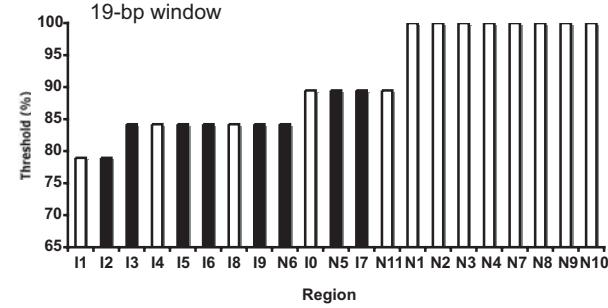
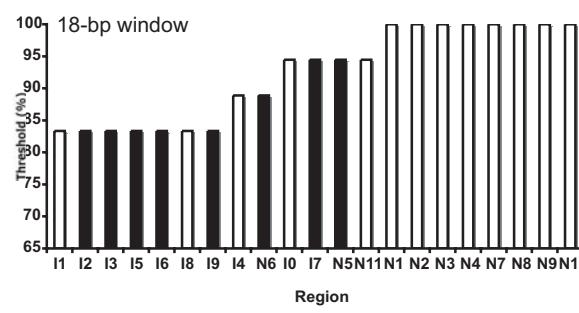
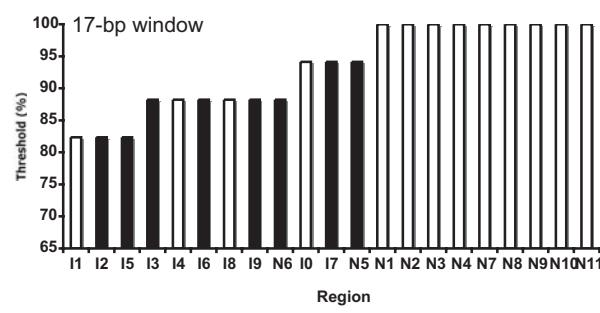
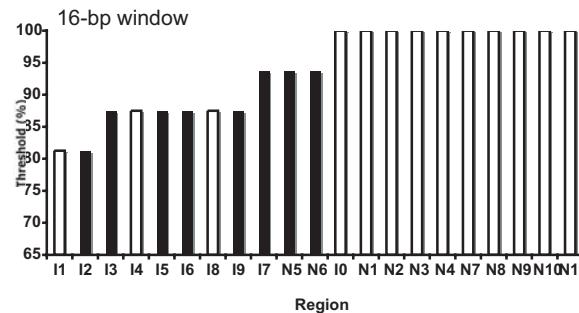
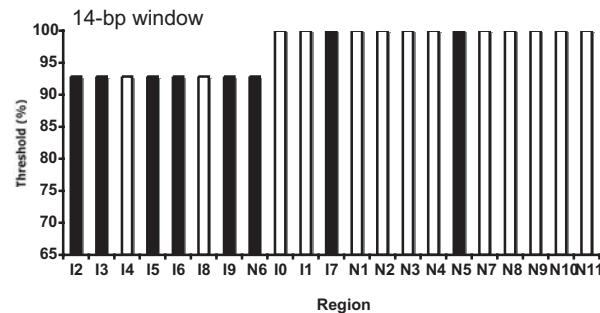
Mouse N7 (background)

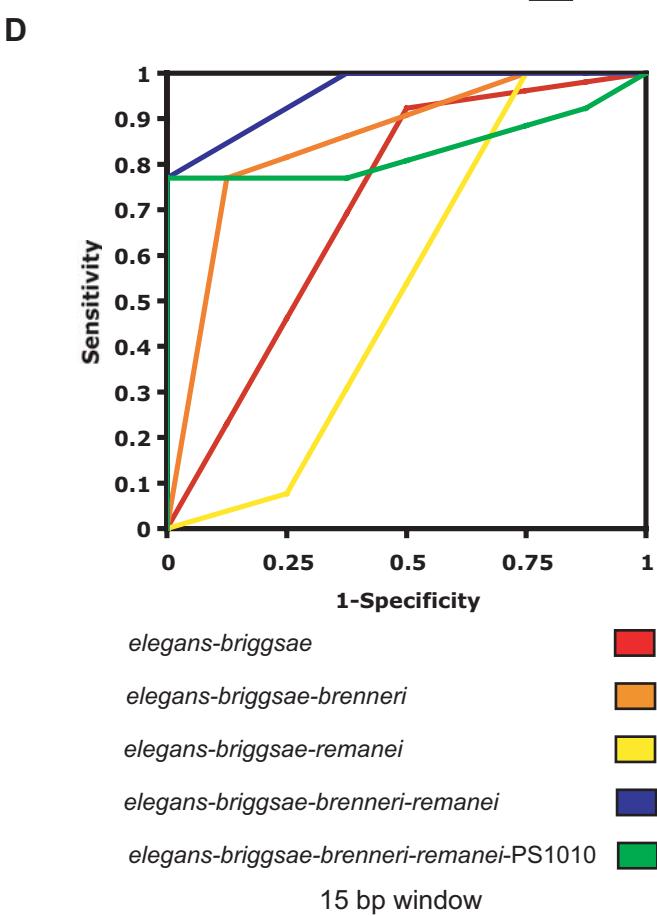
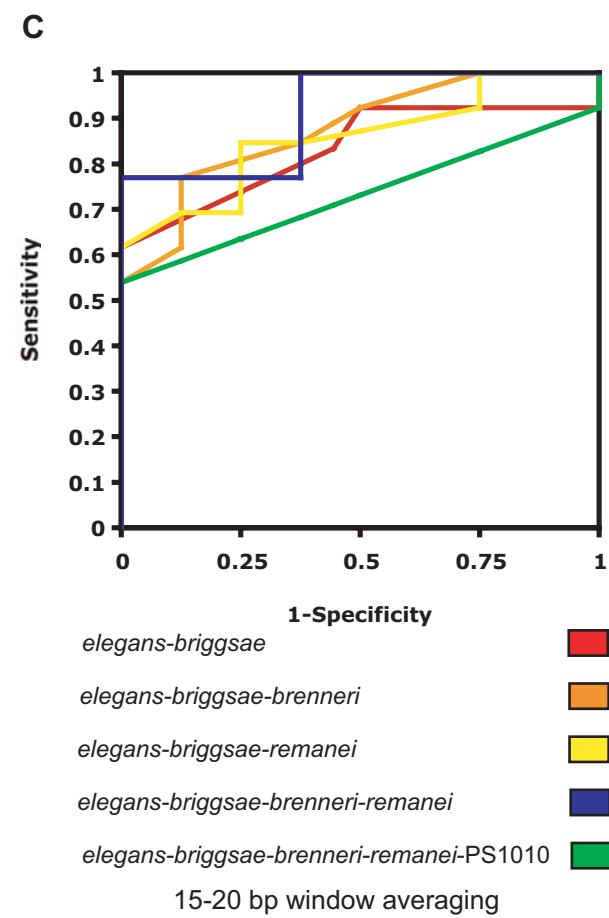
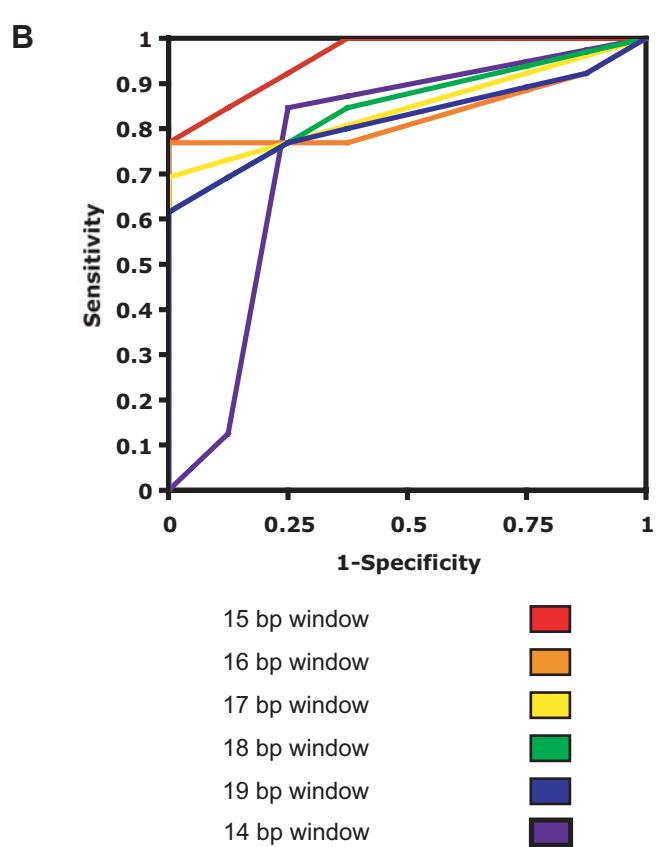
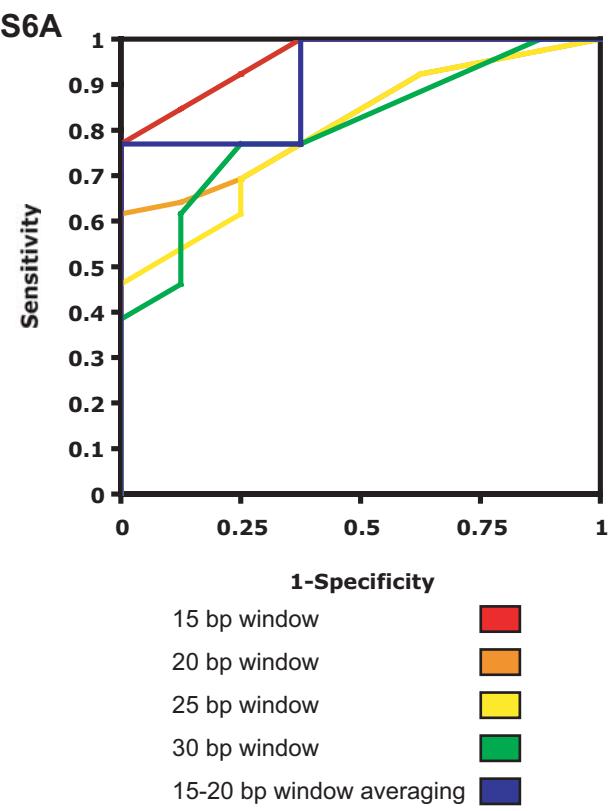
B



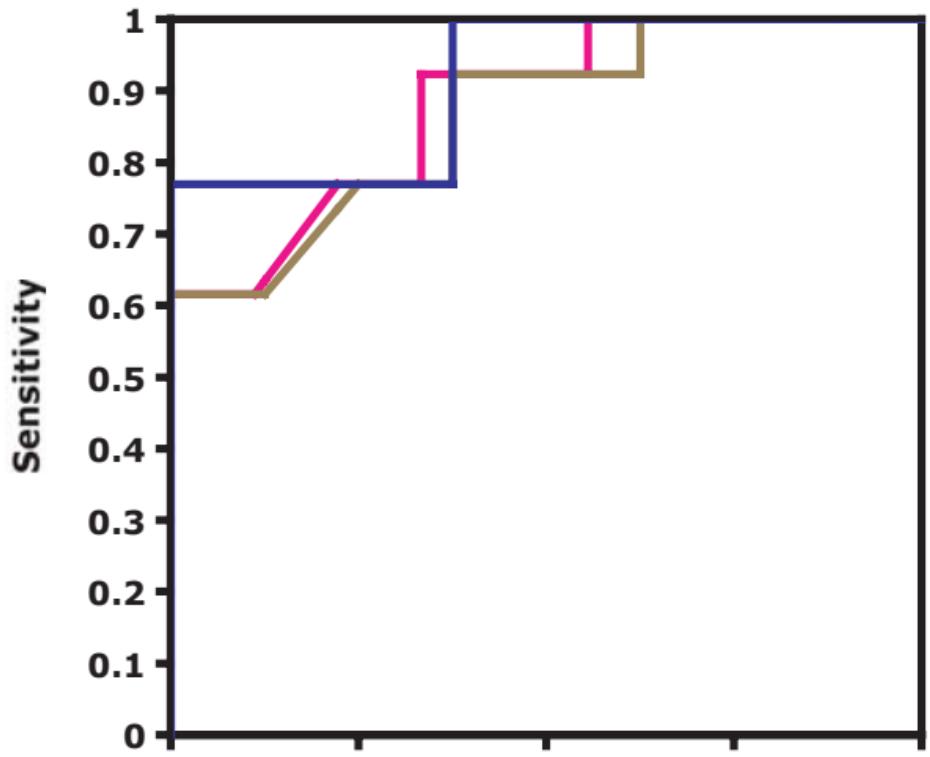
Empty vector (background)

S5A**B****C**

S5D**E**



S6E



1-Specificity

15-20-25-30 bp window averaging

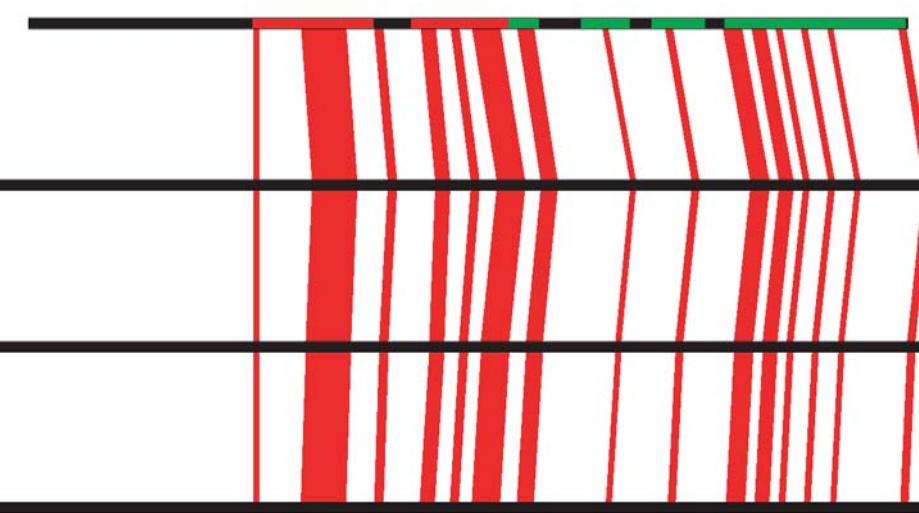
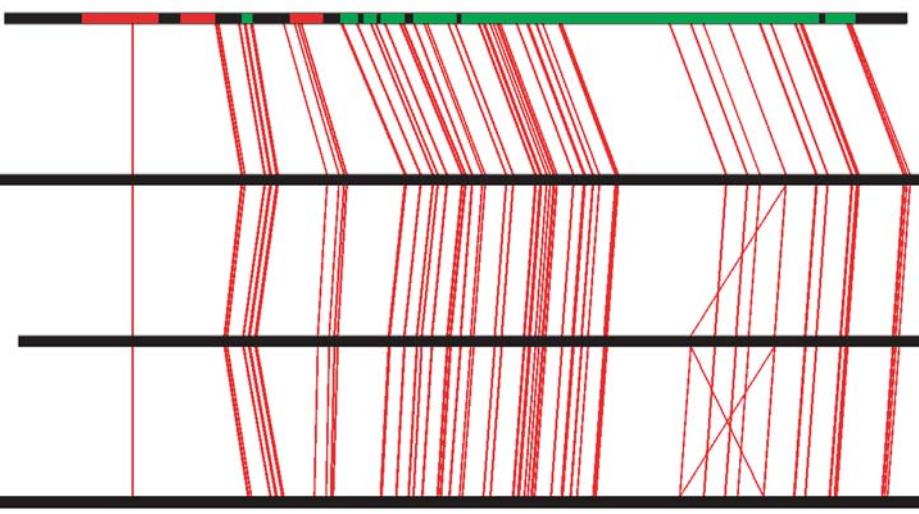


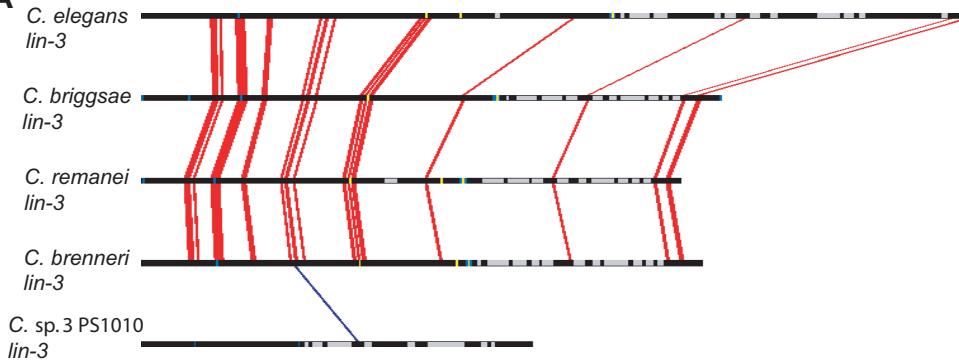
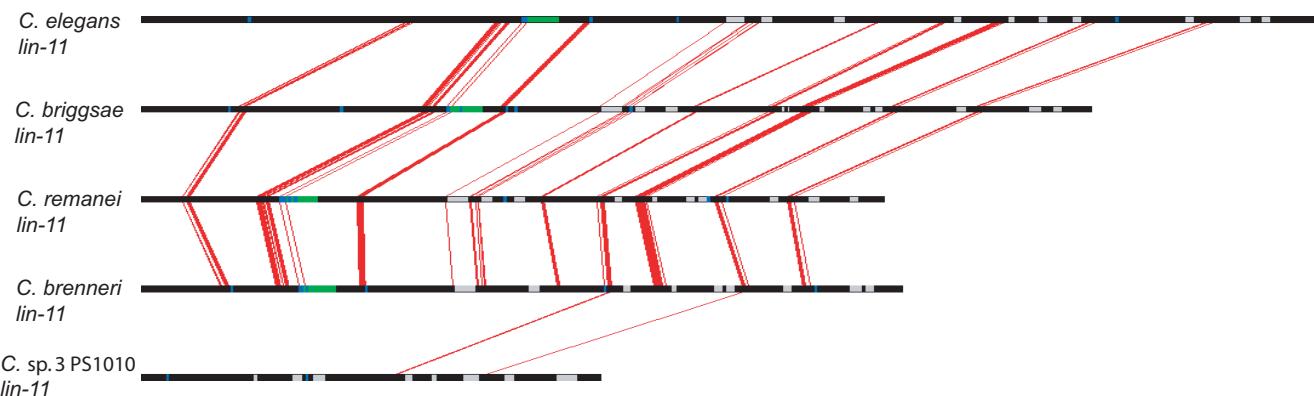
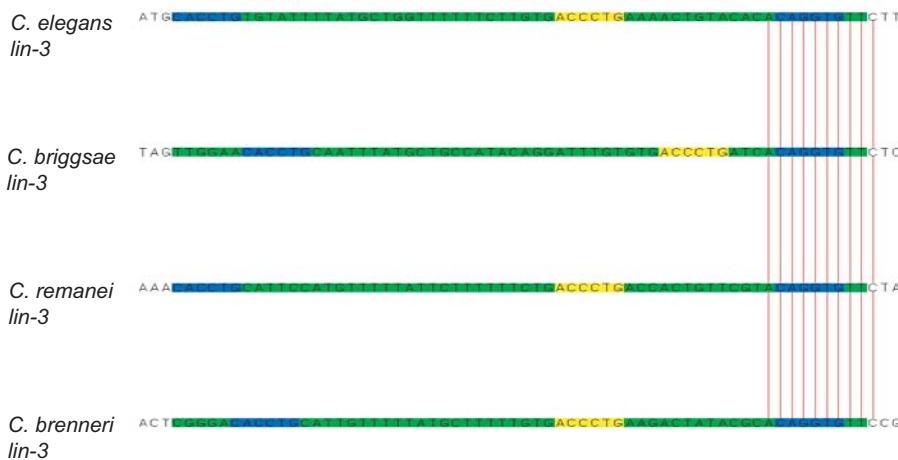
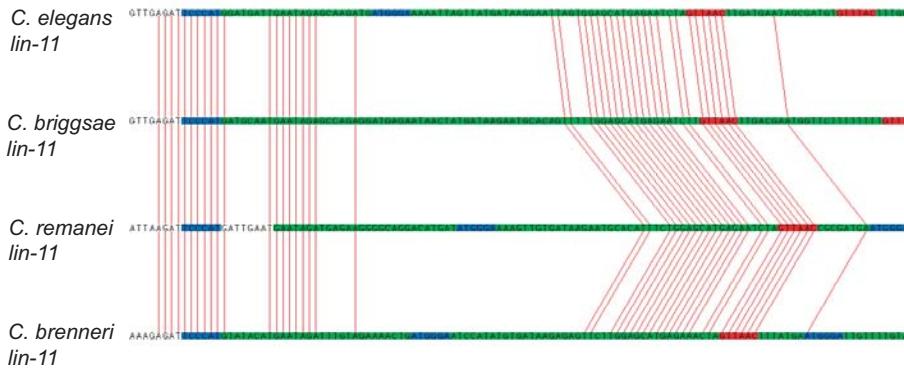
15-20 bp window averaging



25-30 bp window averaging



S7A*unc-54**C. elegans***B***myo-2**C. elegans***C***myo-3**C. elegans*

S8A**B****C****D**

S9A

ACACATGACATAATATTATGATA GATGTTCCCATGTCCTCTGTGGTTGAAAAGGCTTACACAATACATGGCGGTGCATTTGGAAGAAGTCGAGGCCACCGAA CATCCCATC TTGGGGTTGTGGCAACT ACCAACTGTCGATT TGTATACAAATCGG

B

C. elegans
ceh-13/lin-39



C. briggsae
ceh-13/lin-39



C. elegans
mab-5/egl-5



C. briggsae
mab-5/egl-5

**C**

C. elegans
ceh-13/lin-39



C. briggsae
ceh-13/lin-39



C. brenneri
ceh-13/lin-39



C. remanei
ceh-13/lin-39



C. elegans
mab-5/egl-5



C. briggsae
mab-5/egl-5



C. remanei
mab-5/egl-5

**D**

C. elegans ceh-13/lin-39

CACATGACATAATATTATGATAAGATGTTCCCATGTCCTC

C. briggsae ceh-13/lin-39

ATAATGACATAATATTATGATACATCATCTCTTGATT

C. brenneri ceh-13/lin-39

AAGATGACATAATATTATGATAGATCATTCCCTCATGCTC

C. remanei ceh-13/lin-39

CAGATGACATAATATTATGATAGATCTGTGTCCGCATGCT

C. elegans mab-5/egl-5

GCTGCTCCAGGAGTCTCTCACAAATTGIGTCATCTT

C. briggsae mab-5/egl-5

AAGATGACACAATATTGTGAGAAGAAGCAGCTGCT

C. remanei mab-5/egl-5

AAGATGACACAATATTGTGAGAGAGTAGTCACAGAGGGG

