A

P*mex-5:gfp:h2b:tbb-2* UTR
Transgene
PATCs

P*pie-1::gfp::h2b::tbb-2* UTR

P*smu-1::smu-1::gfp::smu-1* UTR

1 kb

Autosomes | X chromosome

Transgene fluorescence in germline
← Fluorescent ("On") ← Variable ← Silenced ("Off")

B
P*pie-1*
H3K9me3 (Z-score ± 1 kb)
**
On Off

C
P*pie-1*
Percentage (%)
***
On / Off
lem-2 − +

D
P*pie-1*
PATC density (± 1 kb)
N.S.
On / Off
On Off

E
H3K9me3
oxTi374 oxTi365 oxTi362 oxTi354 oxTi176 oxTi173 oxTi357
Chr.V
P*pie-1*
Fluorescence (%)

F
Periodic A_n/T_n Clusters (PATCs) in *smu-2* intron
~10bp ~10bp ~10bp ~10bp

```
1    AAAAAtcgataTTTTgagcgAAAAAAgccggAAAAAtggaTTTTatcggga
51   gtcAAAttgttAAAAActgcAAAAAAAtttTAAAAgcaTTTTTTat
101  tAAAATTTgaTTTTTTgagctgagAAAtgccTTTatagacgaaTTTccttt
151  TTTTTTTTTTacAAAAAAttccacAAAAAtggcAAAATTTgactAAAAAt
201  gccaaTTTTgtcgTTTTctccgtgccacagcggccgAAAAtcgaTTTTTa
251  agcgaTTTTcgggtgAAAAAtggtAAAAAAccgactgAAAAAtccagctgAA
301  AAcgacAAAAAcggtaagTTTTTagctaaTTTTcaccTTTTTTtcgataTTT
351  TTTTtactAAAAAAAAAAccgAAAAAttgagTTTTTTTtcAAATTTctgcAA
401  AAAttctgcaaTTTTagcaaTTTccatactaTTTTgacgccgAAAAAgct
451  AAAAAtatgaTTTTTagaggTTTTTaatggAAAAttcatggAAAAATTTTTCA
501  AATTTTTccacgAAAAtcattgAAAAATTTTAAAAAttgataTTTcctatt
551  cAAAgttctagctAAAAActgcaaTTTTagcaaTTTccatactaTTTTTag
601  tactgAAAAAgcctAAAAAtgtgaTTTTTcagagagaTTTcaatggAAAAtt
651  catggaTTTTTccaaTTTTTcaatgAAAAccattgAAAAAAAccctggAAAA
701  ttgagTTTTTcttcAAAgTTTaggAAATTTatgagaaTTTTTTgaatAAAA
751  AgttgaTTTTTTaataaTTTTTTTTTTTTtgaatAAAAAAAAAAtcaacTTTc
801  TTTAAAAATTTagaattAAAAATTTcaaTTTTTTtattcAAAAAttctcatA
851  AATTTcgtAAAcTTTTaatAAAAActcaaTTTTTccgaTTTTTTtcgatg
901  tTTTTcactAAAAAAttggAAAAAttcatcaaTTTcctattgAAAAcctc
```

Bases with PATC > 60 = 985 = 98.5%
Total sum of PATC score = 726,116
PATC density = 726

G
Germline transcripts detected
N = 5,232 genes
Gene PATC density
smu-2
pie-1
smu-1
mex-5 *eft-3* *dpy-30*

Transcripts not detected in germline
N = 9,902 genes
Gene PATC density
Normalized autosome

Genes in bin
221 158 113 80 57 41 29 21 15 11 8 5 4 3 2 1