

Figure S1



Col0

suvr5-1

suvr1

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suvr3

suvr4

suvr1

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suvr3

suvr4

suvr5

Figure S2

Species	Italian name	Common name	Notes
<i>Brachycompsus distichopus</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Monachus scalaris</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Papulae trichocarpa</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Vitis vinifera</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Dioscorea</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Medicago truncatula</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Artemisia annua</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Cuscuta sativa</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Cucurbita</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Erycopsis crinita</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF
<i>Lathyrus sativus</i>			HLLDPPFQWQDCKLMANQDPTPQJATYDKELTVSBDYDQANASD9W8LDDPTTVCSPVLSRMQS0989VYLDSASKNSLMLGRQSLQTELREBNSDSDSVEKJLGSASWQHMLQZT70197FMSQF0XKHHWQKET188SPFTNHLF

<i>Setaria italica</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Sax. may</i>	DMKTYT1VFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Scirpus microstachys</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Oryza sativa</i> , sp., Japanica	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Phragmites australis</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Kicionia comosus</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Populus trichocarpa</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Urtica dioica</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Vitis vinifera</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Urtica dioica</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Medicago truncatula</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Milium quitense</i>	DMKQYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Desmodium</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Carica papaya</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Thlaspi arvense</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Arabidopsis thaliana</i> ATCC213740	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL
<i>Physcomitrella patens</i>	DREKYYVTFPPTTFTSIVNGLWLVLP1ECEPPG1PWTBHPKREKLIVGQDPLPVBYPRVYIMQ1LALMGLDLSL2E1AV1M0R4A7797F7EALACCTPTVGDMLWYIQLWHLHPTD1CQWQ-1DWWQHCHADADAT1HNLZEL

Figure S3

SELEX experiment

5'-GTTTCCCAGTCACTACNNNNNNNNNNNNNGTCATAGCTGTTCTG-3'

oligo with 15
random bases



5'-GTTTCCCAGTCACTACNNNNNNNNNNNNNGTCATAGCTGTTCTG-3'
3'-CAAAAGGGTCAGTGATG-5'

anneal with
complementary



5'-GTTTCCCAGTCACTACNNNNNNNNNNNNNGTCATAGCTGTTCTG-3'
3'-CAAAAGGGTCAGTGATGNNNNNNNNNCAGTATCGACAAAGGAC-5'

fill up with
klenow



x10 times



incubate with ss and
recombinant prot



wash x3

phenol/chloroform
precipitate DNA



15 cycles of PCR



Clone and sequence

Figure S4

TACTAGAGGACGTCT
TAGTAGTACCGCGCC
TACTAGTAAGGTGGG
TAGTAGGAGAATGGG
TAGCTAGATCGTTGT
TACTACTACAGTCAC
TACTAGTACATATAGACC
CCTAGTAGTAGTAGT
TACTAGCAGTTGTAT
TAGTAGTACCGCGCC
TACTAGCGGTTGGTG
TATAGTGAATGTTG
CTCCCAGGTTAGTAGGCC
CTCCCAGGTTAGTAGGCC
TAGTAGCGTGAGATG
TAGTTACAACTAGAGGTGT
TAGACTACGGCCTGT
CTCCCAGGTTAGTAGGCC
TAGACTACGGCCTGT
TAGTAATAAACGCTG
CCAGTCCTAGTAGTA
TAGTAATGTACTGGC
TACTAGATGC GTTGG
TACTAGCAGTTGTAT
TAGTAGGAGAATGGG
TAGACCTAGTAACGA
TAGTAGGTTCTAGCG



Figure S5

Genomic SELEX

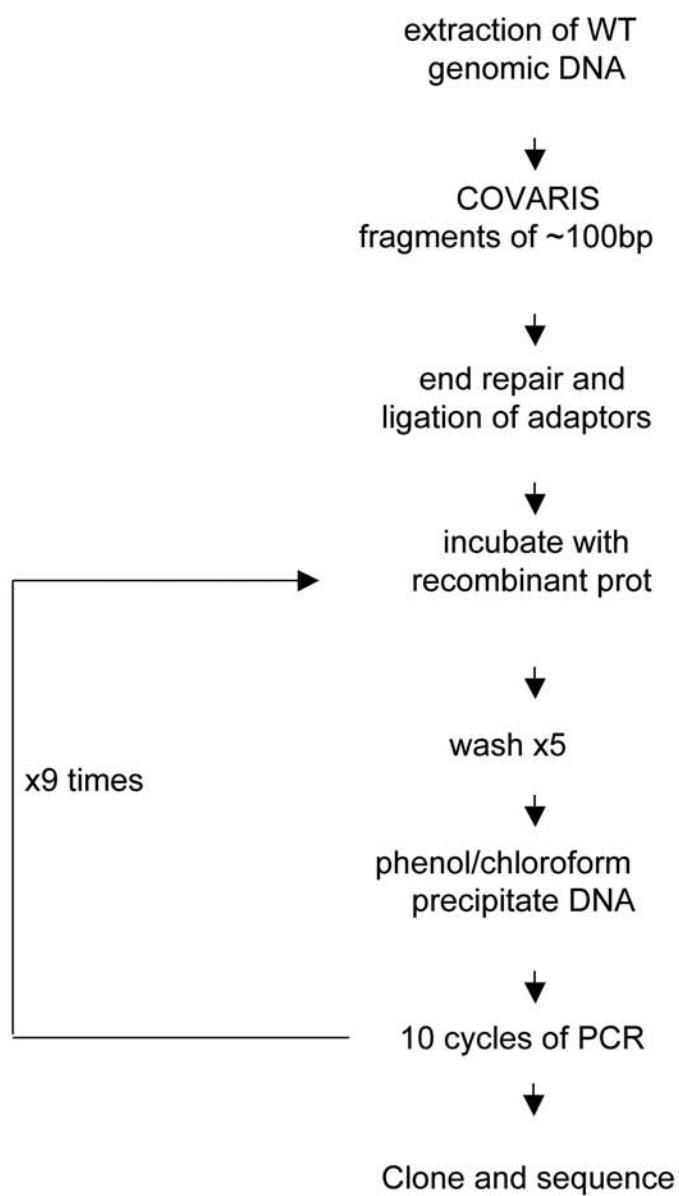


Figure S6

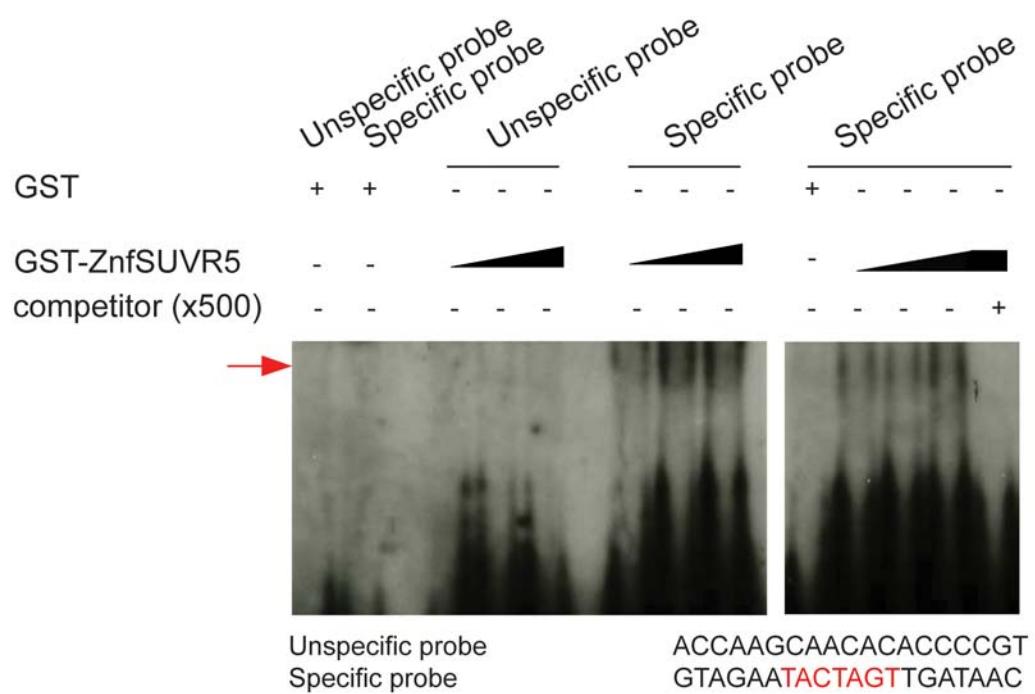


Figure S7

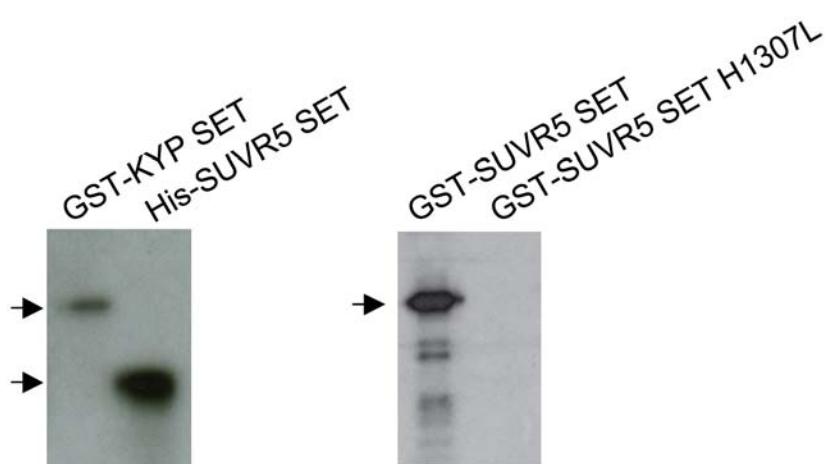


Figure S8

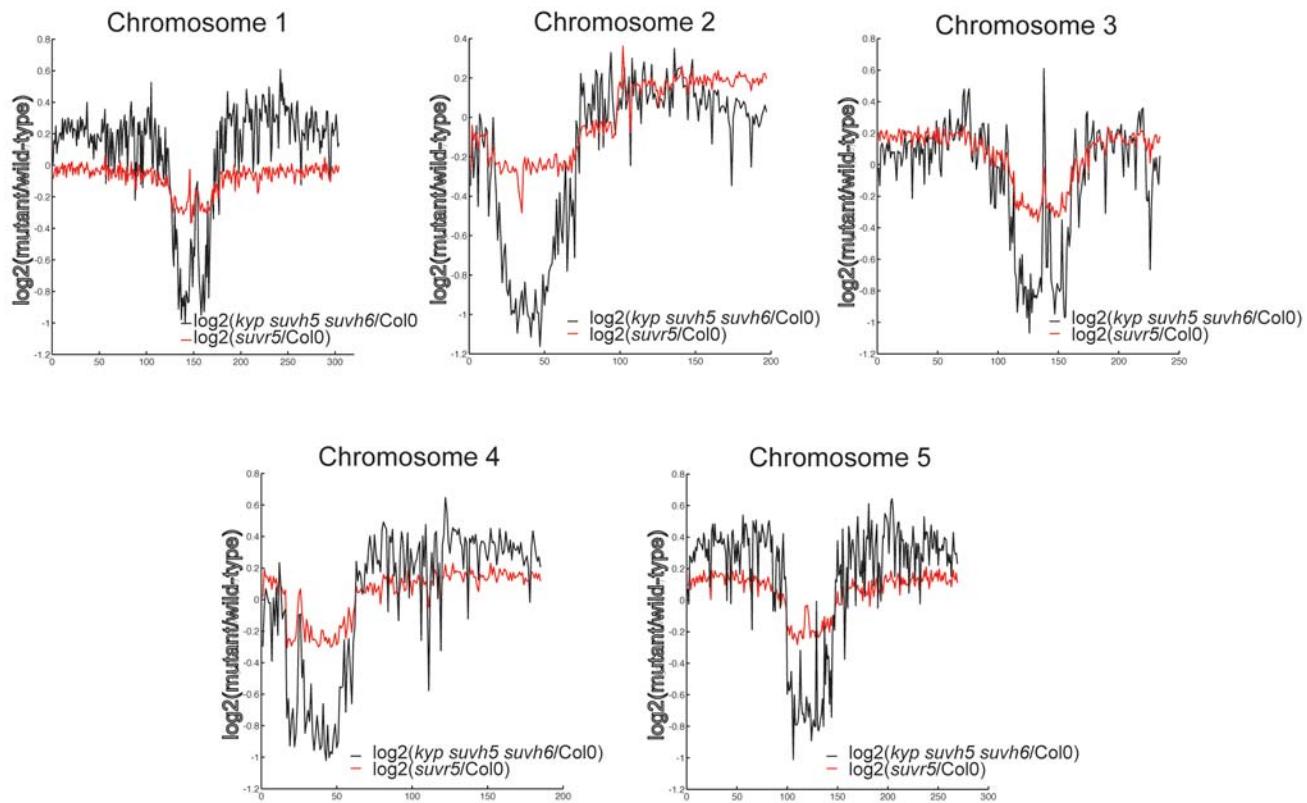
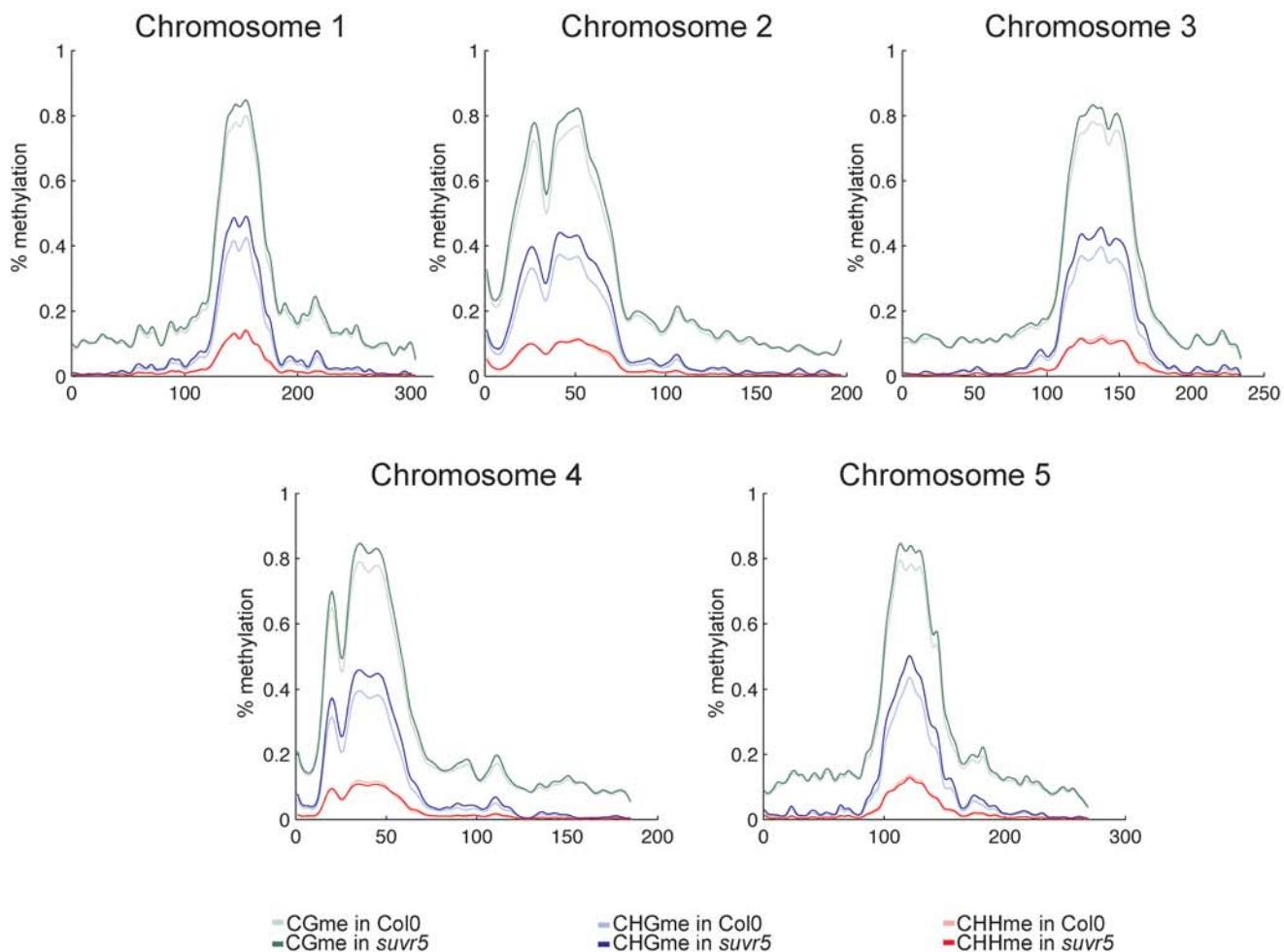


Figure S9

A



B

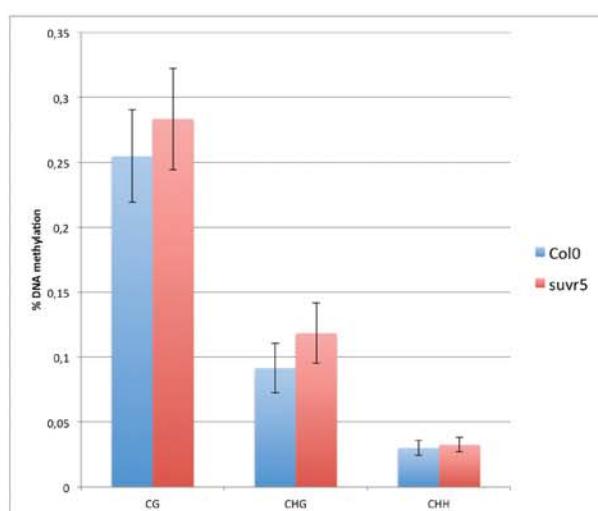


Figure S10

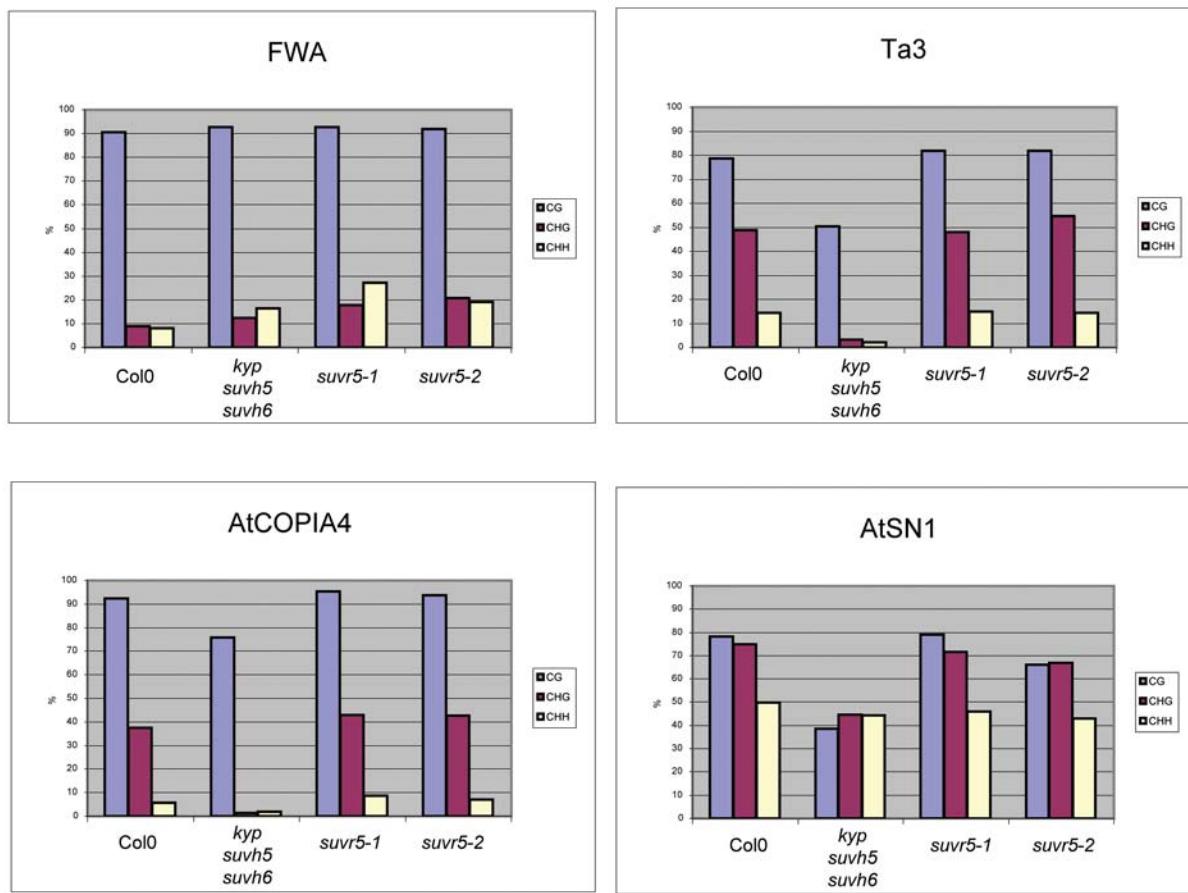


Figure S11

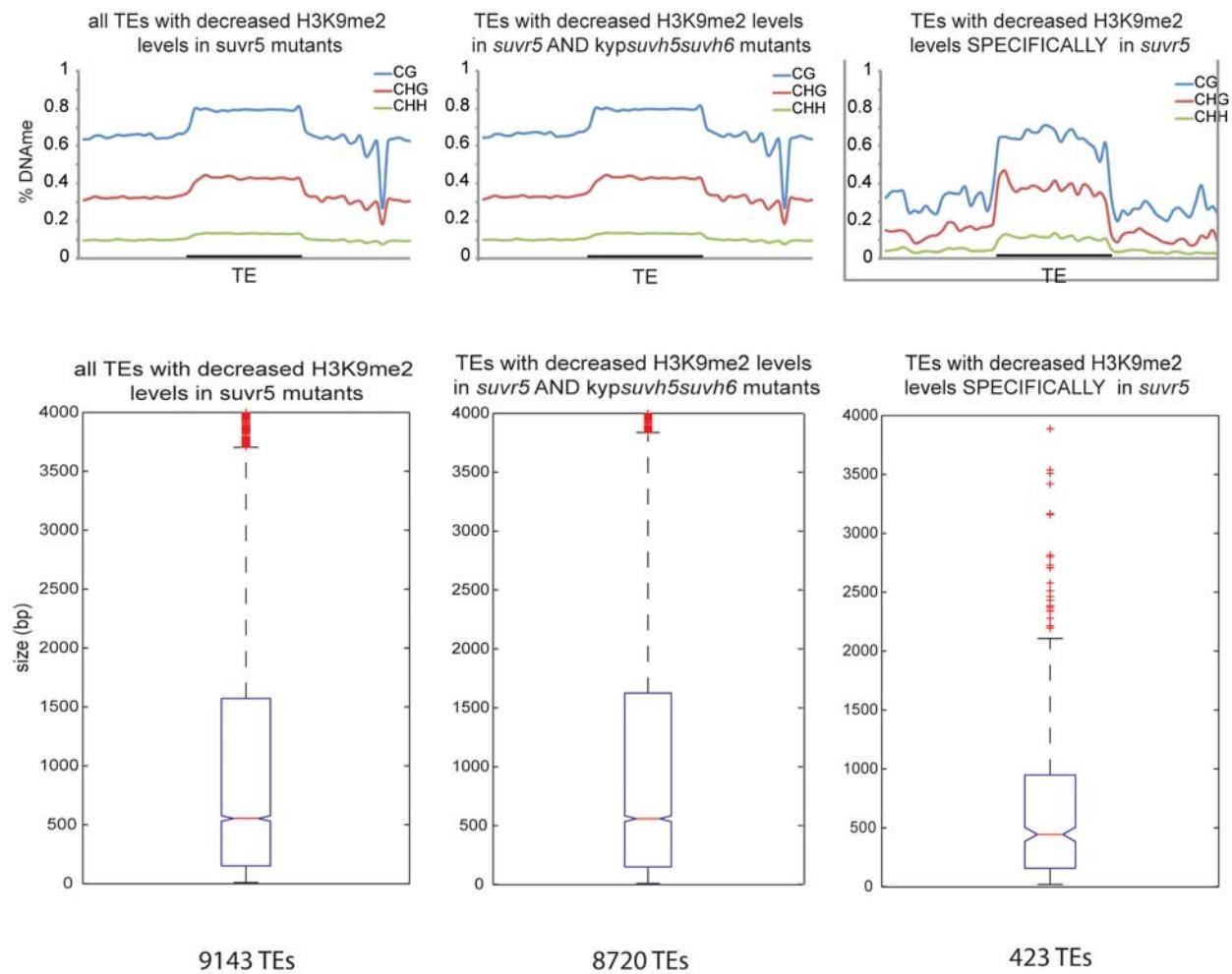


Figure S12

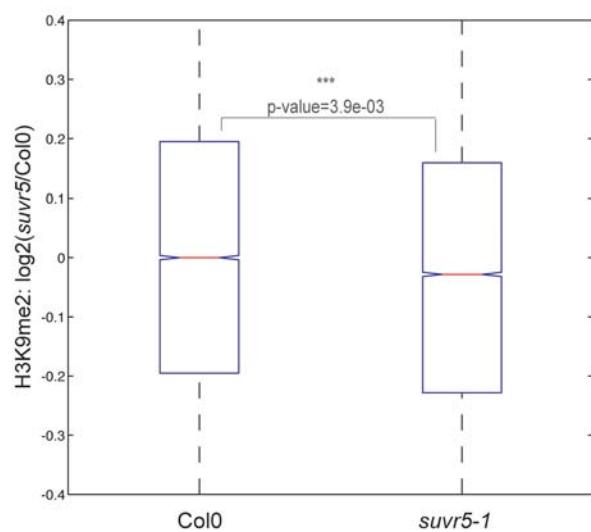


Figure S13

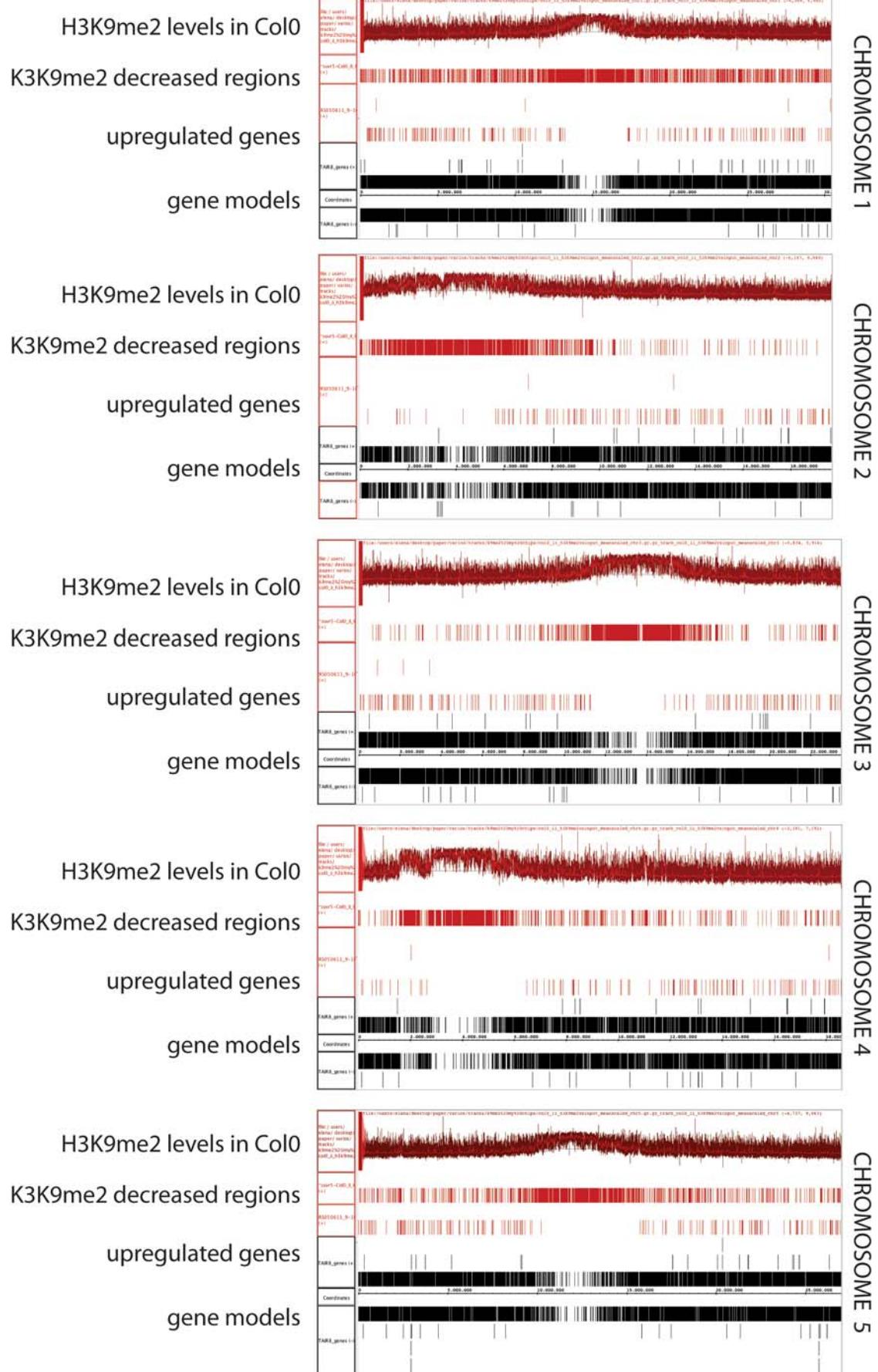


Figure S14

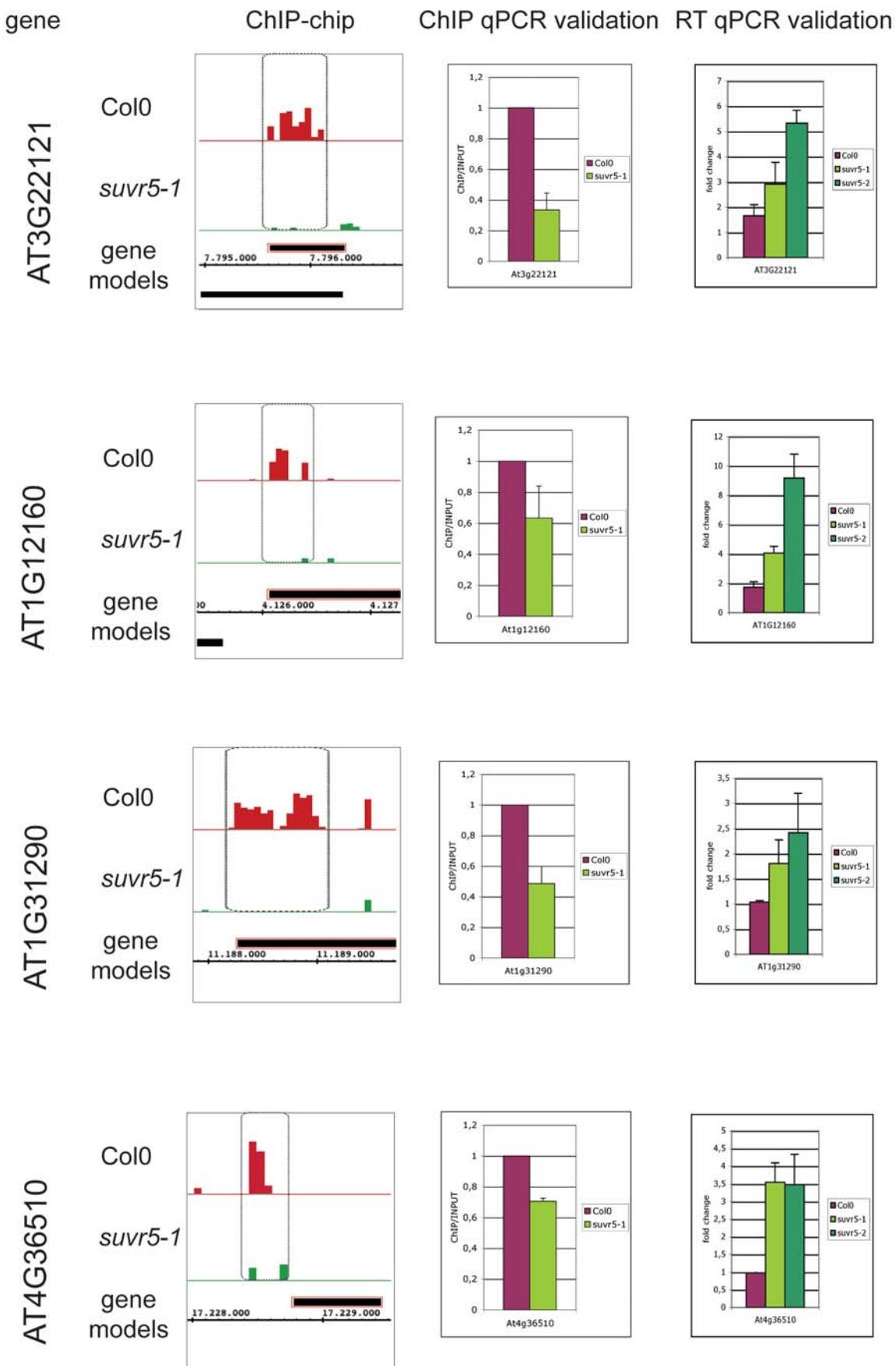


Figure S15

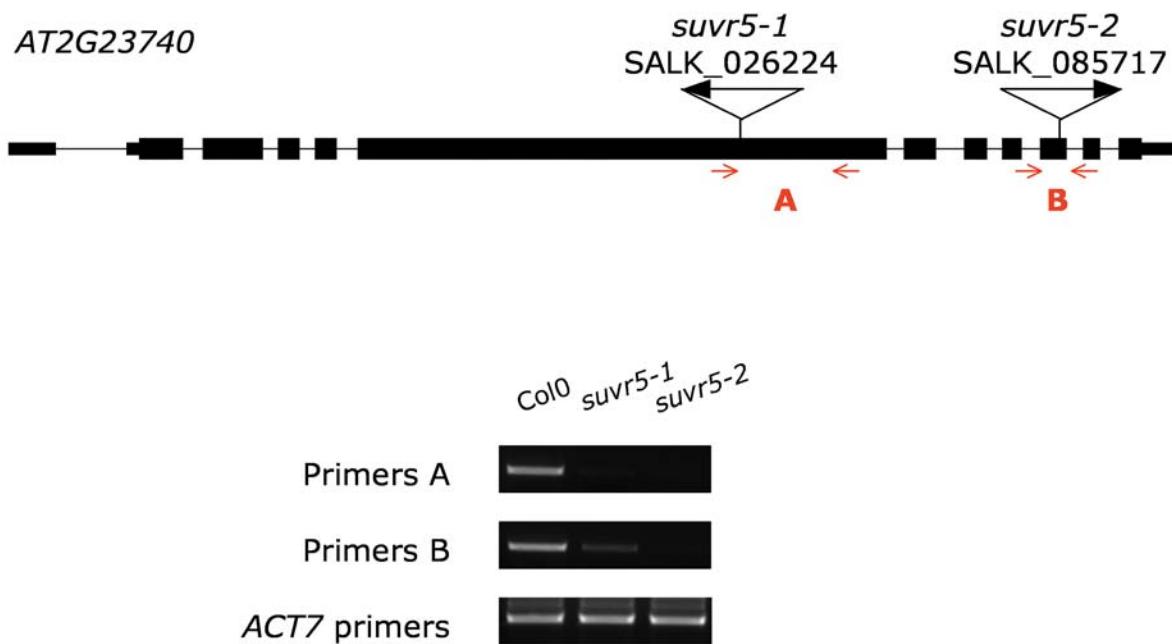


Figure S16

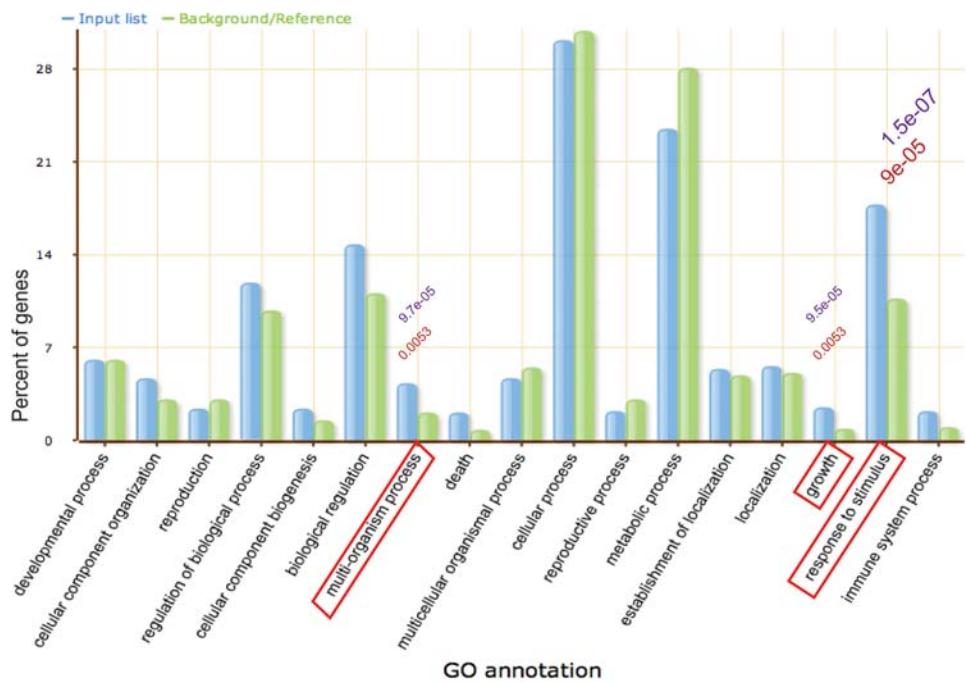


Figure S17

A

A	C	G	T
0.296126	0.076962	0.083588	0.543323
0.595311	0.038226	0.254842	0.111621
0.000000	0.906728	0.077982	0.015291
0.006624	0.000000	0.000000	0.993373
0.993374	0.000000	0.000000	0.006625
0.015290	0.077981	0.906727	0.000000
0.111620	0.254841	0.038225	0.595310
0.543322	0.083587	0.076961	0.296125

B

>AT3G12830



>AT5G13320

>AT5G54490

Figure S18

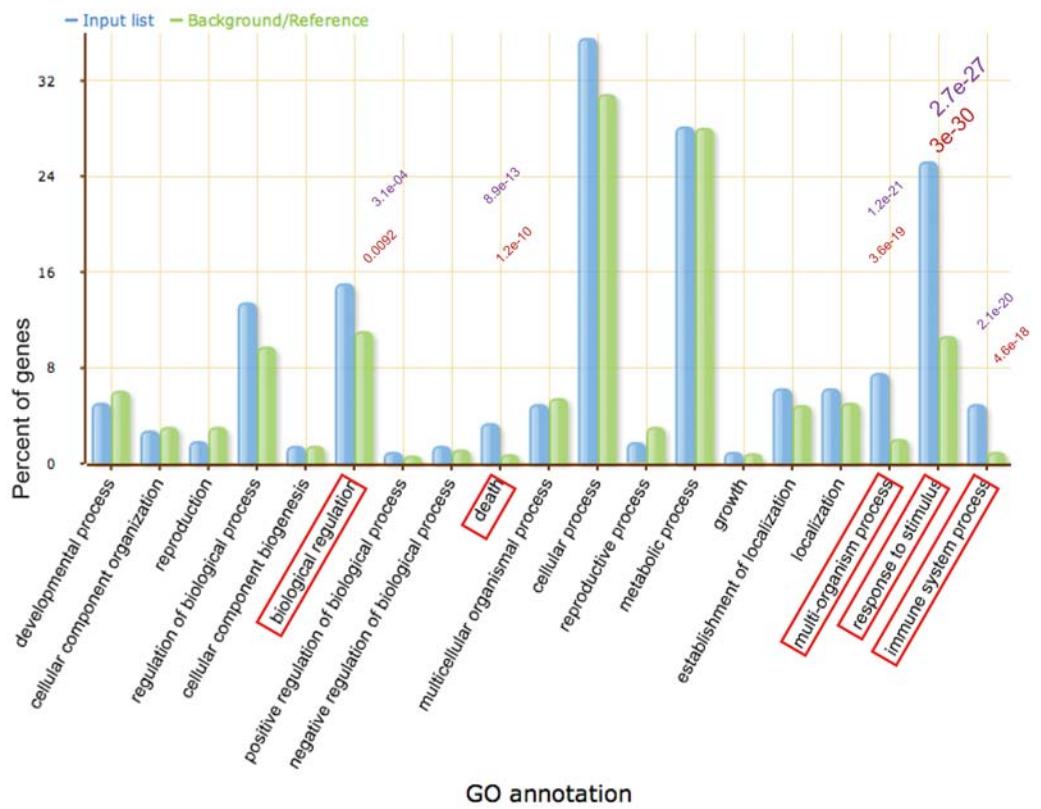


Figure S19

