

Sequence comparison of α -boxes

<i>Dm scute</i> α 1	---TAAGCCC GTAT--
<i>Dm scute</i> α 2	---GCAACCCCTA---
<i>Dm scute</i> α 3	----GCTCCCC TATTT
<i>CsASH2</i> α 1	----TCGCCCC T----
<i>Sm ASH</i> α 1	----TCTCCCC TGG--
<i>Sm ASH</i> α 2	----CCACCCCT----
<i>Sm ASH</i> α 3	TGGGAGTCCCC-----
<i>Dm asense</i> α 1	TTTTTCATCCCC TAG--
<i>Dm asense</i> α 2	TGGGTGTCCCC TT----
<i>Tc asense</i> α 1	---GATTTCCCC T----
<i>Tc asense</i> α 2	---GAATCCCC-----
<i>Dp asense</i> α 1	----ATTCCCC T----

Sequence comparison of β -boxes

<i>Dm scute</i> β 1	GTTATTTTT -
<i>Dm scute</i> β 2	GTTCATTTTT -
<i>Dm scute</i> β 3	--GCATTTTT -
<i>CsASH2</i> β 1	--TAGTTTTT
<i>Sm ASH</i> β 1	GTTTTTTTTGT
<i>Sm ASH</i> β 2	GTTTATTT -
<i>Sm ASH</i> β 3	GTCAATTTTT -
<i>Dm asense</i> β 1	GTTAGTTTT -
<i>Tc asense</i> β 1	GTTACTTTTT -
<i>Tc asense</i> β 2	-TTATTTTTT
<i>Tc asense</i> β 3	-TTCGTTTTT
<i>Tc asense</i> β 4	-TTATTTTTT
<i>Tc asense</i> β 5	-TTATTTTTT
<i>Dp asense</i> β 2	GTTCTTTCT -
<i>Dp asense</i> β 1	GCTATTTTC -

Sequence comparison of E-boxes

<i>Dm scute</i> E1	CACCTG
<i>Dm scute</i> E2	CAGCTG
<i>Dm scute</i> E3	CAAATG
<i>CsASH2</i> E1	CATCTG
<i>CsASH2</i> E2	CAGCTG
<i>CsASH2</i> E3	CATATG
<i>Sm ASH</i> E1	CATATG
<i>Sm ASH</i> E2	CACGTG
<i>Sm ASH</i> E3	CAGTTG
<i>Sm ASH</i> E4	CACCTG
<i>Dm asense</i> E1	CAGCTG
<i>Dm asense</i> E2	CAAATG
<i>Dm asense</i> E3	CAGATG
<i>Dm asense</i> E4	CAGGTG
<i>Tc asense</i> E1	CAGCTG
<i>Tc asense</i> E2	CATGTG
<i>Dp asense</i> E1	CAGCTG

Sequence comparison of N-boxes

<i>Dm scute</i> N-box	CACGCG
<i>Sm ASH</i> N-box	CACGCG
<i>Dm asense</i> N-box	CACGCG
<i>Tc asense</i> N-box	CACGCG
<i>Dp asense</i> N-box	CACGAG

Additional file 2: Alignment of the SOP enhancer elements of *Drosophila melanogaster*, *Tribolium castaneum*, *Daphnia pulex*, *Strigamia maritima* and *Cupiennius salei*. Boxes in *Drosophila* enhancers have been described previously (Culi and Modolell 1998). In all other species the individual binding sites were identified by manual screening based on consensus sequences (E-box: CANNTG; α -box: GGRRADYCCCY; β -box: GTTMDTTTT; N-box: CACGMG).