Serpent/dGATAb regulates *Laminin B1* and *Laminin B2* expression during *Drosophila* embryogenesis

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Supplementary Table, Figures and Figure Legends

Tissue	LanB1 mRNA	LanB1 5´-GFP	LanB1 3´-GFP	LanB2 mRNA	LanB2 5´-GFP	LanB2 3´-GFP
Yolk sac			Х	Х		Х
Farly mesoderm	x	X		X	X	
Lany mesoderni		Λ		Λ	Λ	
Amnioserosa		Х			Х	
Hemocytes	Х		Х	Х	Х	Х
Fat body	Х		Х	Х	Х	Х
.						
Somatic muscles	Х	Х		Х	Х	
Visceral muscles	Х	Х		Х		Х
(fore- and hindgut)	Ň	N/		Ň		N/
	Х	Х		Х		Х
(midgut)	V		V	V	V	
AMP and PMG	X		X	X	X	
Dorsal median cells	V		V	V		V
	~		X	X		Χ
Solivery Clande/			V			
Malpighian Tubules			Â			

Supplementary Table S1: GFP-Expression in *LanB1/LanB2* reporter constructs compared to previously published *LanB1* and *LanB2* mRNA expression.

LanB1 and *LanB2 mRNA* expression depends on Montell and Goodman (1989), while *LanB2 mRNA* distribution is also derived from Wolfstetter and Holz (2012).

_A	Lamin	inB1		chr2L:7,810,471-7,820,894
cdc14	LanB1-RA	LanB1-RB	ł	
	LanB1 IE5'-GFP	LanB1 IE3'-GFP		
dina.		in the second		conservation acore
B g	ATA binding site 1		Score: 9.05761	chr2L:7,811,901-7,811,940
T G C G	T T T C T G T C T		T T G T G G C C T Score: 7.35006	<u>conservation score</u> <u>G T T T T T G T T</u> chr2L:7,812,037-7,812,076
T A D S	C G A A C A G A A	A A C T C A A G A T A $\frac{1}{2}$ GATAA	A C T C C A A A A Score: 15.312	conservation score A A C T C G A G chr2L:7,813,882-7,813,921
тс Еs	T T A A A A A C T rp binding site 2	$\frac{1}{2} = \frac{1}{2} = \frac{1}$	C T C A C C G G C Score: 14.176	CONSERVATION SCORE T C G T A G C T C chr2L:7,813,962-7,814,001
сс Fg	CGTCGAAAT ATA binding site 3	C T T C A T G A T A A	G A A C A T A A A Score: 11.8331	<u>Conservation score</u> <u>G G T C A T C G A</u> chr2L:7,814,200-7,814,239
G T GGG	A C T A C A A A T ATA binding site 4	G A A T A C T G	A A A A C A G C G Score: 7.73118	<u>Cónservation score</u> <u>A T C C A A C G C</u> chr2L:7,814,290-7,814,329
A T H s	T G A G A G T A G rp binding site 3	TCGGATTGATA	A T A G G A T C C Score: 12.475	conservation score A T T C A G T T T chr2L:7,814,454-7,814,493
A T	ТА СА САТС	ТСТБТТБАТАА	GCGGTTTAC	A G T G A T G A T

Supplementary Figure S1: Gene locus of *LanB1* with reporter gene constructs and predicted TFBSs. (A) Schematic representation of *LanB1* transcripts, derived reporter gene constructs (green) and conservation score (red) of the genomic region with predicted TFBSs. (B-H) Predicted TFBSs of either GATA- or Srp-binding sites with position frequency matrices (colored letters) and enrichment scores (boxes), conservation scores and accompanying DNA sequence.



Supplementary Figure S2: Gene locus of *LanB2* with reporter gene constructs and predicted TFBSs. (A) Schematic representation of *LanB2* transcripts, derived reporter gene constructs (green) and conservation score (red) of the genomic region with predicted TFBSs. (B-E) Predicted TFBSs of either GATA- or Srp-binding sites with position frequency matrices (colored letters) and enrichment scores (boxes), conservation scores and accompanying DNA sequence.



Supplementary Figure S3: Myogenic *srp* expression leads to ectopic *Laminin* B2 reporter activation and disrupted myogenesis. (A-A⁽¹⁾) Control animals show GFP-reporter gene expression of *LanB2 IE 3* (A, A⁽¹⁾ in green, A⁽¹⁾, A⁽¹⁾ white) and*Mef2*-GAL4 driven*UAS-lacZ*activity (A, A^{<math>(1)} blue), with anti-ß3Tubulin as muscle marker (red). (B-B⁽¹⁾) Ectopic expression of *UAS-srpNC* with *Mef2*-GAL4 is sufficient for *Laminin* reporter gene activation in somatic muscles and unfused myoblasts, leading to disrupted myogenesis. GFP reporter gene expression (B, B⁽¹⁾ green; B⁽¹⁾, B⁽¹⁾ white) and anti-ß3Tubulin (red). Scale bars = 100 µm.</sup></sup>