

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

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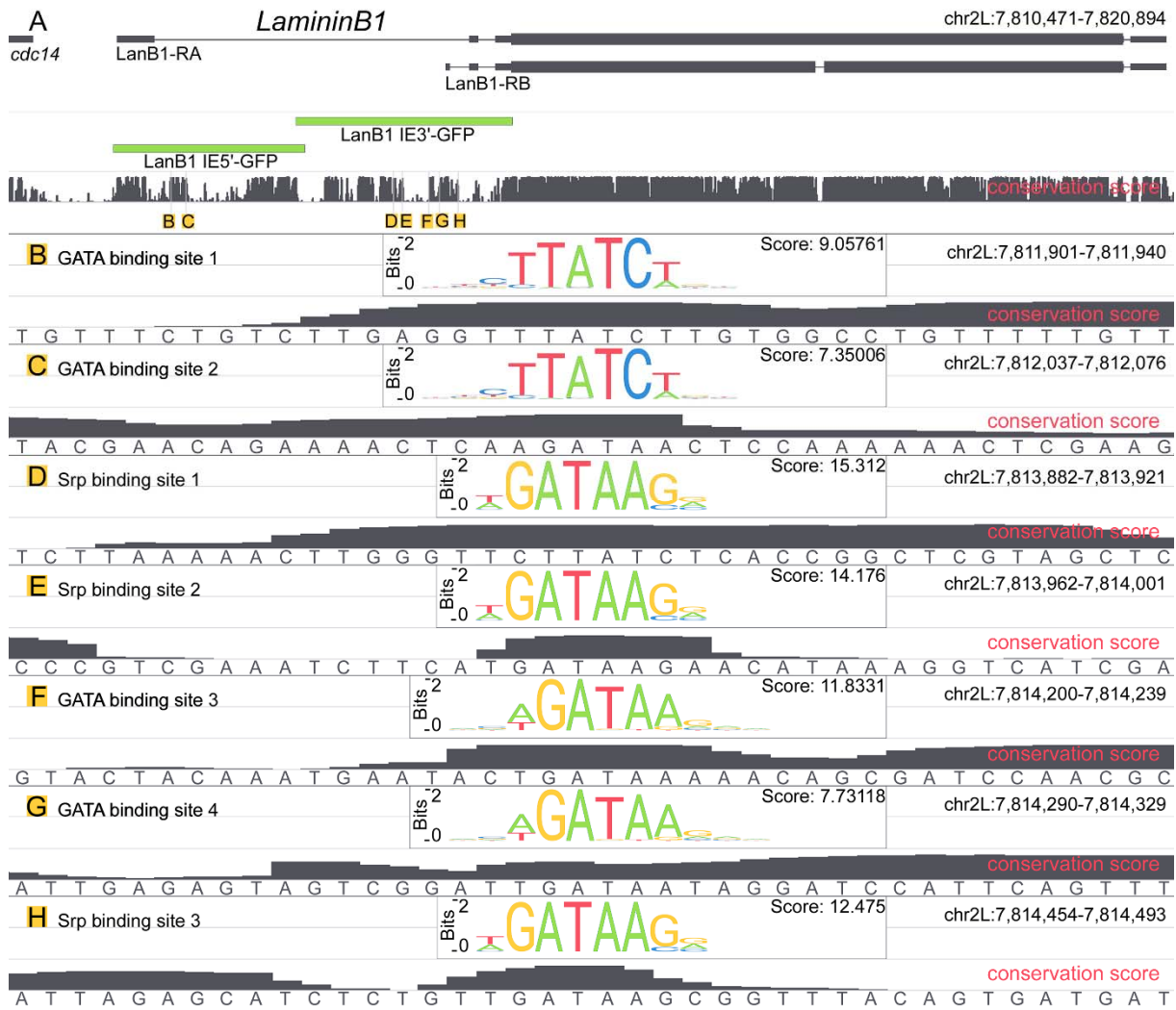
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Supplementary Table, Figures and Figure Legends

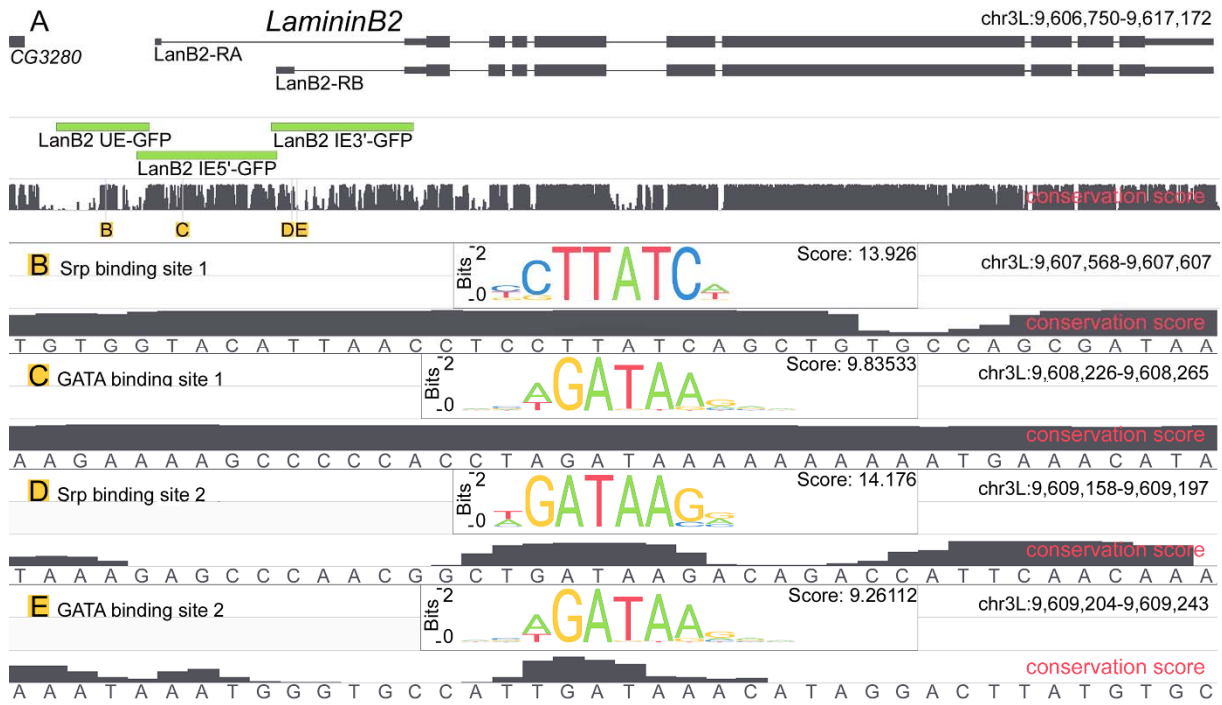
Supplementary Table S1: GFP-Expression in *LanB1/LanB2* reporter constructs compared to previously published *LanB1* and *LanB2* mRNA expression.

| Tissue | <i>LanB1</i> <i>mRNA</i> | LanB1 5'-GFP | LanB1 3'-GFP | <i>LanB2</i> <i>mRNA</i> | LanB2 5'-GFP | LanB2 3'-GFP |
|---|-----------------------------|-----------------|-----------------|-----------------------------|-----------------|-----------------|
| Yolk sac | | | X | X | | X |
| Early mesoderm | X | X | | X | X | |
| Amnioserosa | | X | | | X | |
| Hemocytes | X | | X | X | X | X |
| Fat body | X | | X | X | X | X |
| Somatic muscles | X | X | | X | X | |
| Visceral muscles (fore- and hindgut) | X | X | | X | | X |
| Visceral muscles (midgut) | X | X | | X | | X |
| AMP and PMG | X | | X | X | X | |
| Dorsal median cells | X | | X | X | | X |
| Salivary Glands/ Malpighian Tubules | | | X X | | | |

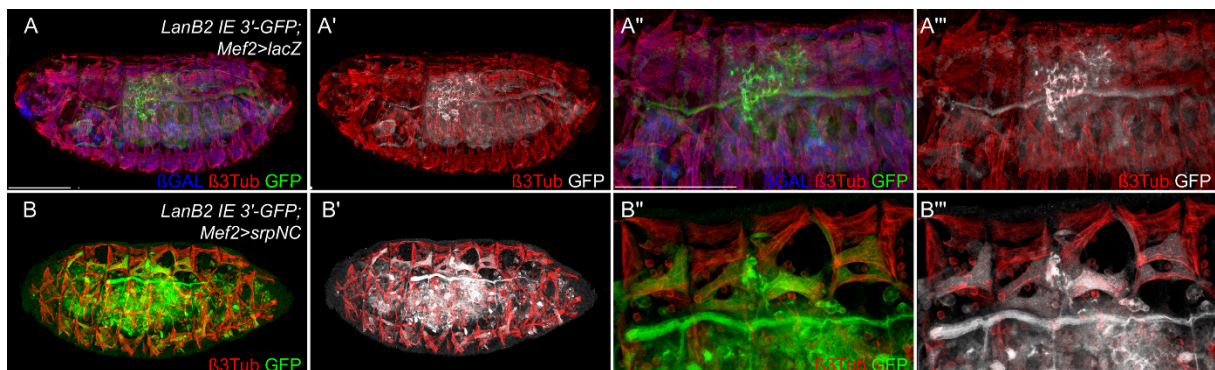
LanB1 and *LanB2* mRNA expression depends on Montell and Goodman (1989), while *LanB2* mRNA distribution is also derived from Wolfstetter and Holz (2012).



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''') Control animals show GFP-reporter gene expression of *LanB2 IE 3'* (A, A'' in green, A', A''' white) and *Mef2-GAL4* driven *UAS-lacZ* activity (A, A'' blue), with anti- β 3Tubulin as muscle marker (red). (B-B''') 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'' green; B', B''' white) and anti- β 3Tubulin (red). Scale bars = 100 μ m.