

Supplementary Information

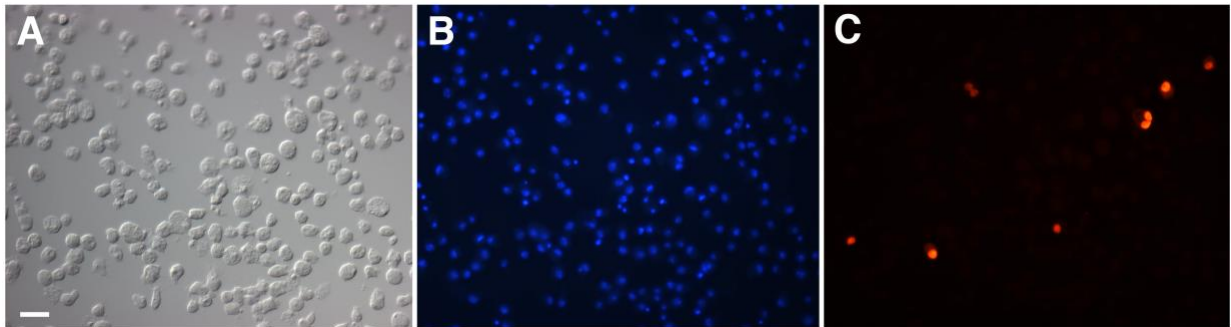
Autoregulation of the glial gene *reversed polarity* in *Drosophila*

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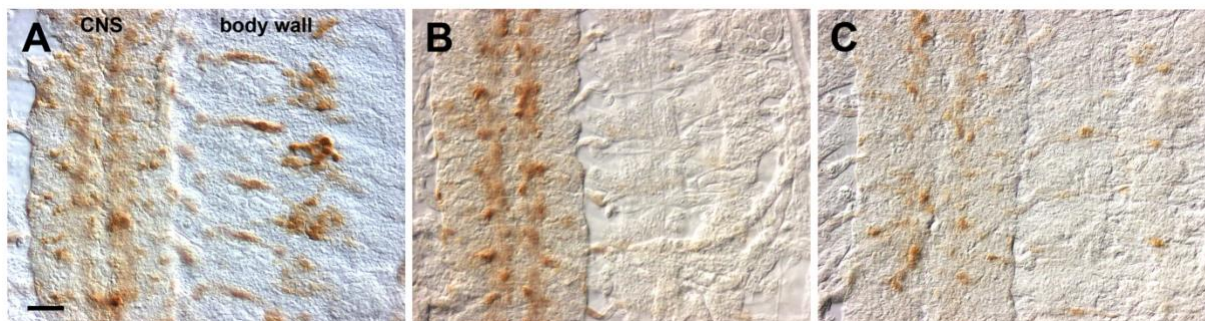
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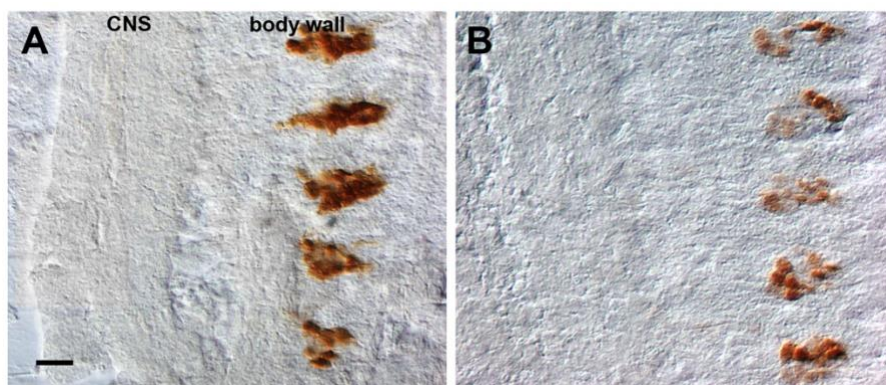
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Supplemental Figure 1. Expression of Repo in S2 cells co-transfected with pUAST-repo and pAc-Gal4 plasmids. A) Transfected S2 cells under DIC appear normal in size and shape. B) The same field of cells under UV light showing the DAPI stained nuclei of each cell. C) The same field of cells showing cells expressing Repo protein. Repo is not expressed in S2 cells under normal conditions, nor in cells co-transfected with empty pAc vector (not shown). Scale bar: 20 μ m.



Supplemental Figure 2. *repo -4.3/-2.3ΔRBS1* reporter line in *Act-repo* background show the wild type β-gal pattern. Filleted late stage 16 embryos are pictured showing 5 adjacent abdominal segments of the ventral nerve chord (CNS) and the right lateral body wall, as stained with anti-β-gal antibody using HRP immunohistochemistry. Anterior is up. Scale bar, 20μm. (A) Wild type β-gal pattern of *repo -4.3/-2.3* shows glial cell staining and lateral patches of epidermal cells. (B) Wild type pattern of *repo -4.3/-2.3ΔRBS1* shows glial staining but lacks epidermal patches. (C) representative embryo β-gal pattern in collection of *-4.3/-2.3ΔRBS1* in *Act-repo* background. All embryos in the collection have wild type pattern without epidermal expression. 1/8 of the embryos are heterozygous for *Act-repo*, *UAS-repo*, and *-4.3/-2.3ΔRBS1*.



Supplemental Figure 3. *Sca/Xho* fragment alone in *repo -2.8/-2.3* construct shows no ectopic expression of β-gal in *Act-repo* background and is indistinguishable from wild type. Filleted late stage 16 embryos are pictured showing 5 adjacent abdominal segments of the ventral nerve chord (CNS) and the right lateral body wall, as stained with anti-β-gal antibody using HRP immunohistochemistry. Anterior is up. Scale bar, 20μm. (A) *repo -2.8/-2.3* embryo show staining in patches of epidermal cells but lack glial cell staining. (B) Representative embryo β-gal pattern in collection of *-4.3/-2.3ΔRBS1* in *Act-repo* background. All embryos in the collection have wild type epidermal patch expression. 1/8 of the embryos are heterozygous for *Act-repo*, *UAS-repo*, and *-4.3/-2.3ΔRBS1*.