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Genetic interaction between Sox10 and Zfhx1b during enteric nervous system development.

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Nadège Bondurand

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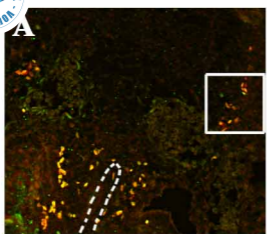
Submitted on 7 May 2010

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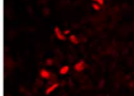
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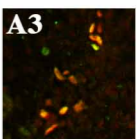
Zfhlx1b/Sox10



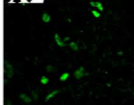
A1



A3

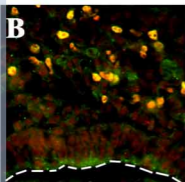


A2

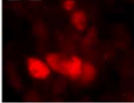


E10.5/E11.5

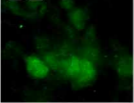
Zfhlx1b/Sox10



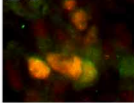
B1



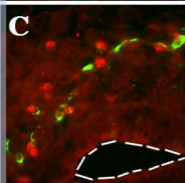
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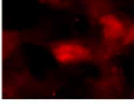
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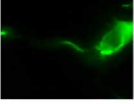
Zfhlx1b/Jun



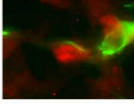
C1



C2

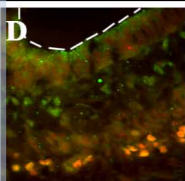


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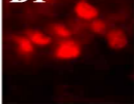


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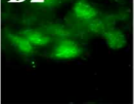
Zfhlx1b/Sox10



D1



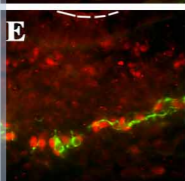
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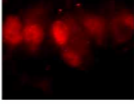
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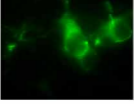
Zfhlx1b/serp



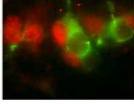
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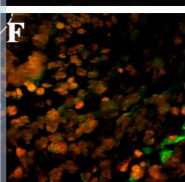
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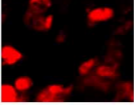
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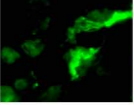
Zfhlx1b/GFAP



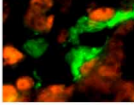
F1



F2

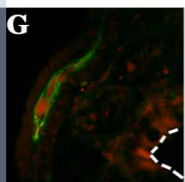


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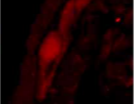


Adult

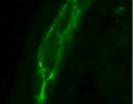
Zfhlx1b/GFAP



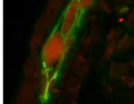
G1

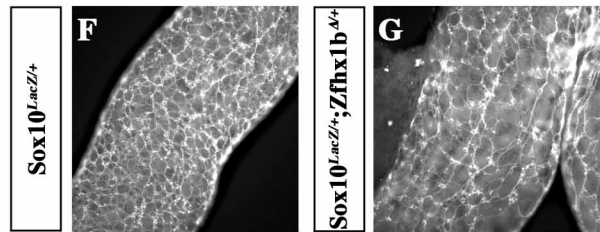
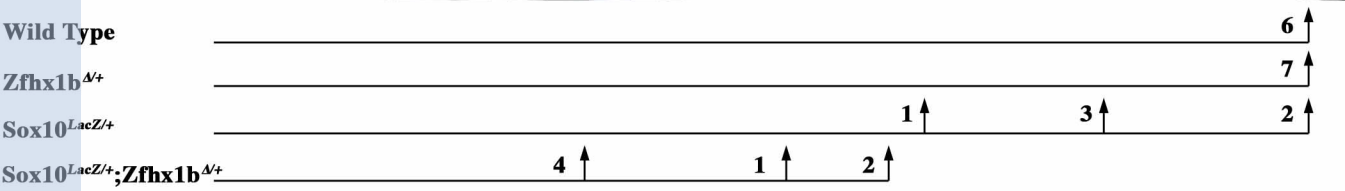
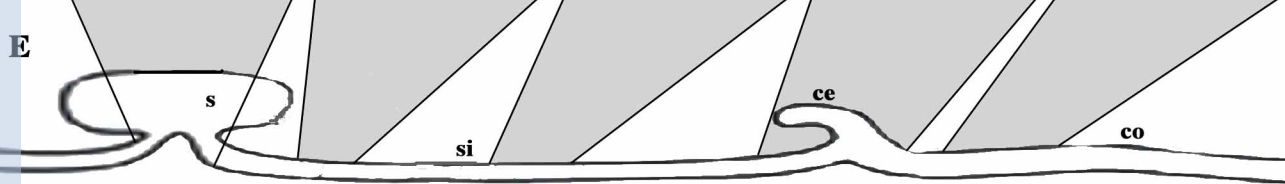
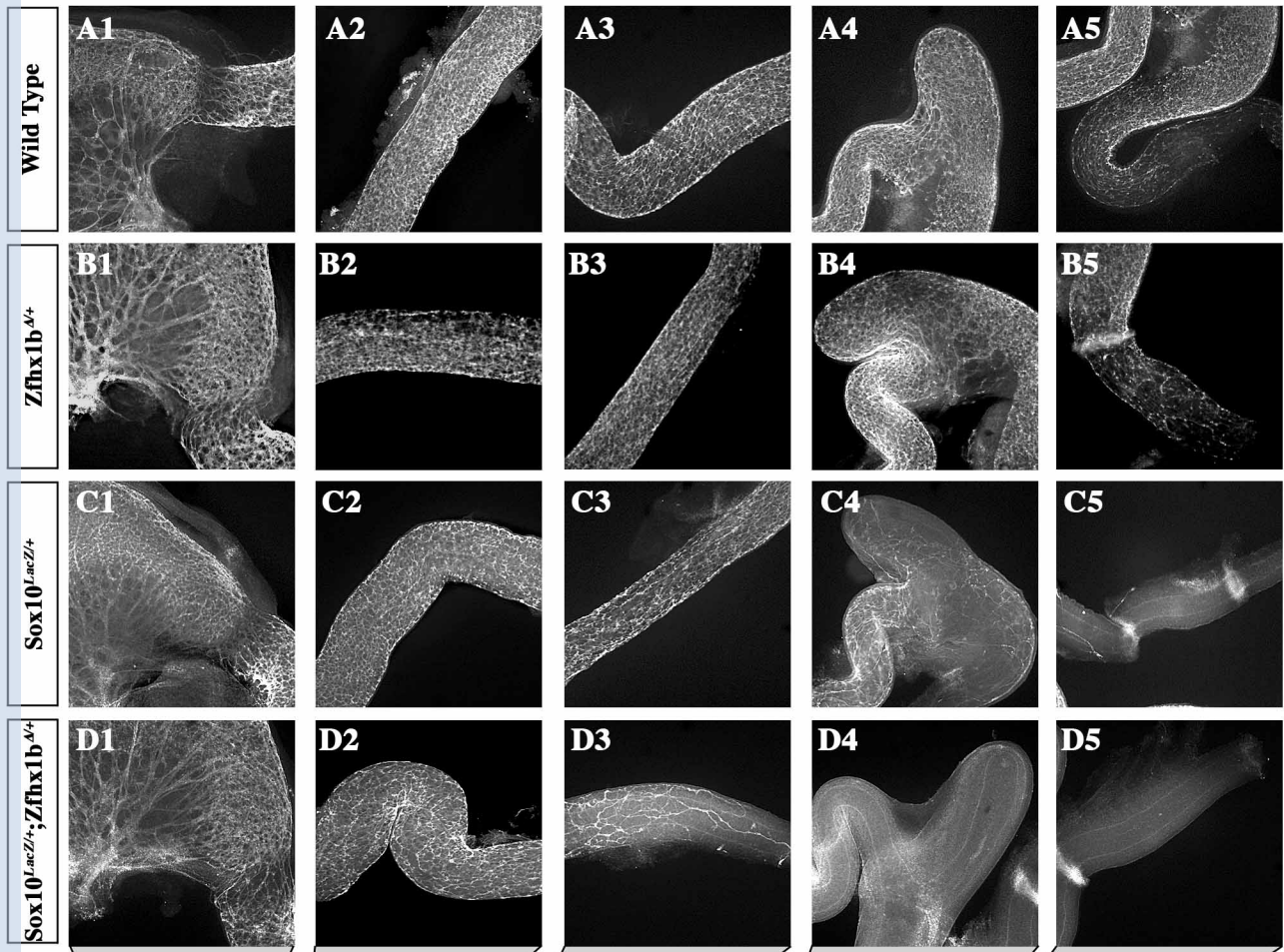


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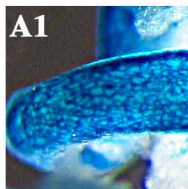
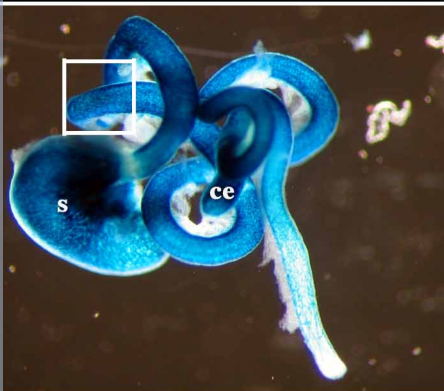


G3

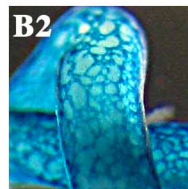


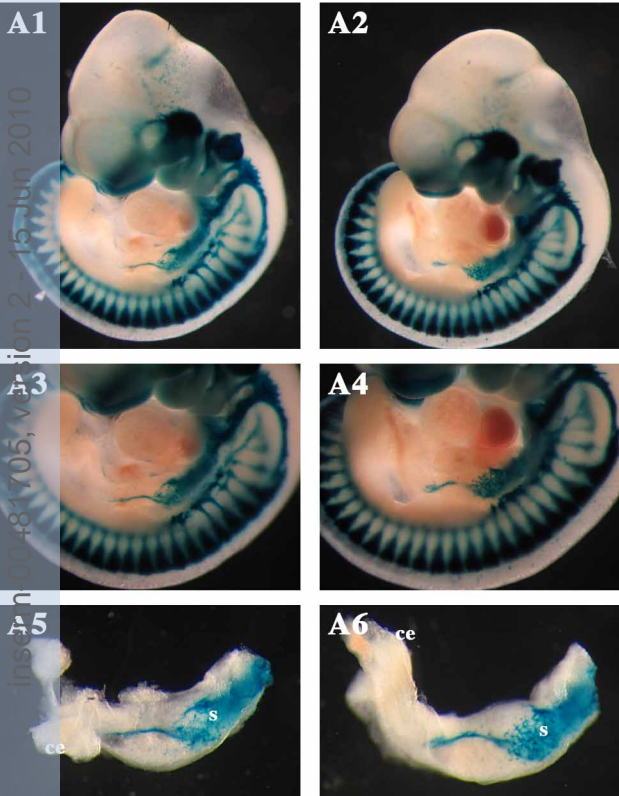
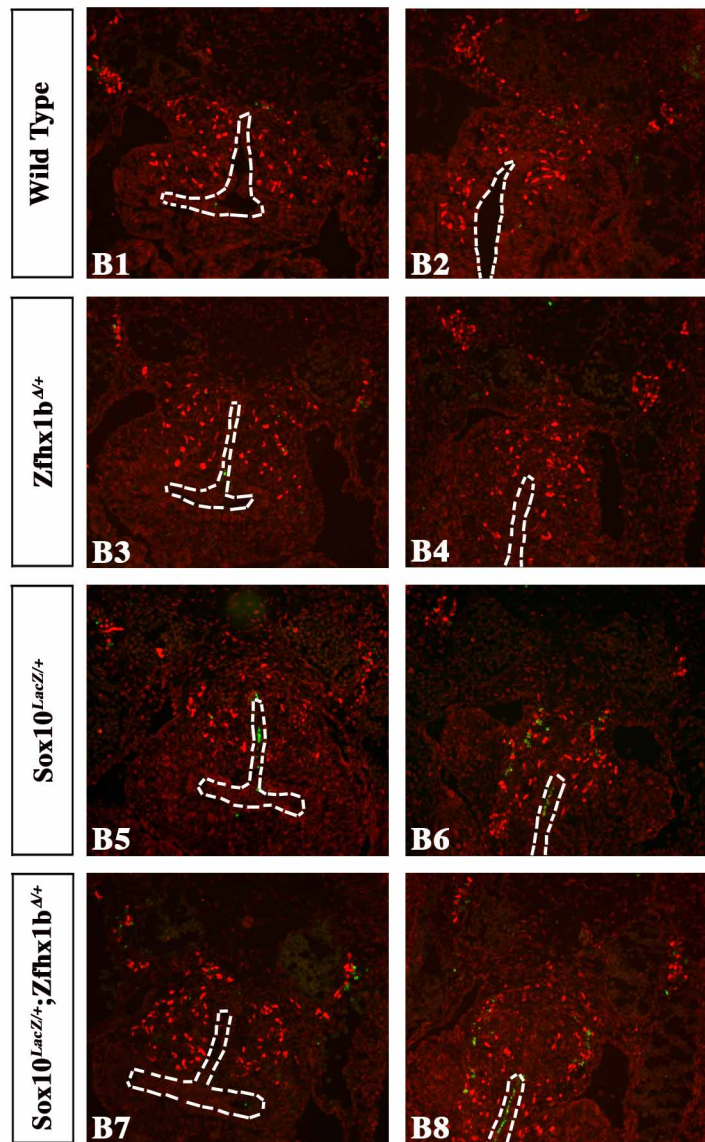
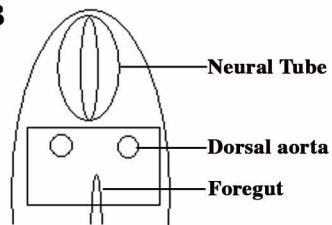


Sox10^{LacZ/+}



Sox10^{LacZ/+};Zfhx1b^{Δ/+}



A**Sox10^{LacZ/+}****Sox10^{LacZ/+};Zfhx1b^{Δ/+}****B**

n 100484705, version 2, 15 Jun 2010
 ins 45

A**Sox10^{LacZ/+}****Sox10^{LacZ/+};Zfhx1b^{Δ/+}****B****Sox10^{LacZ/+}****Sox10^{LacZ/+};Zfhx1b^{Δ/+}****A1****A2****B1****B2**

Head

inseffm-00481705 version 2 - 15 Jun 2010

A3**A4****B3****B4**

Cranial

ot

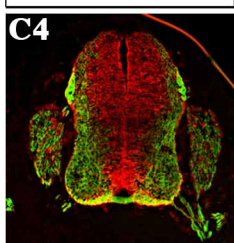
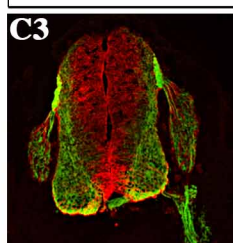
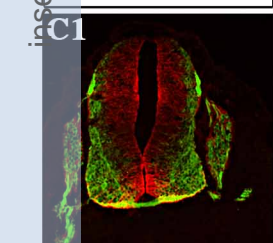
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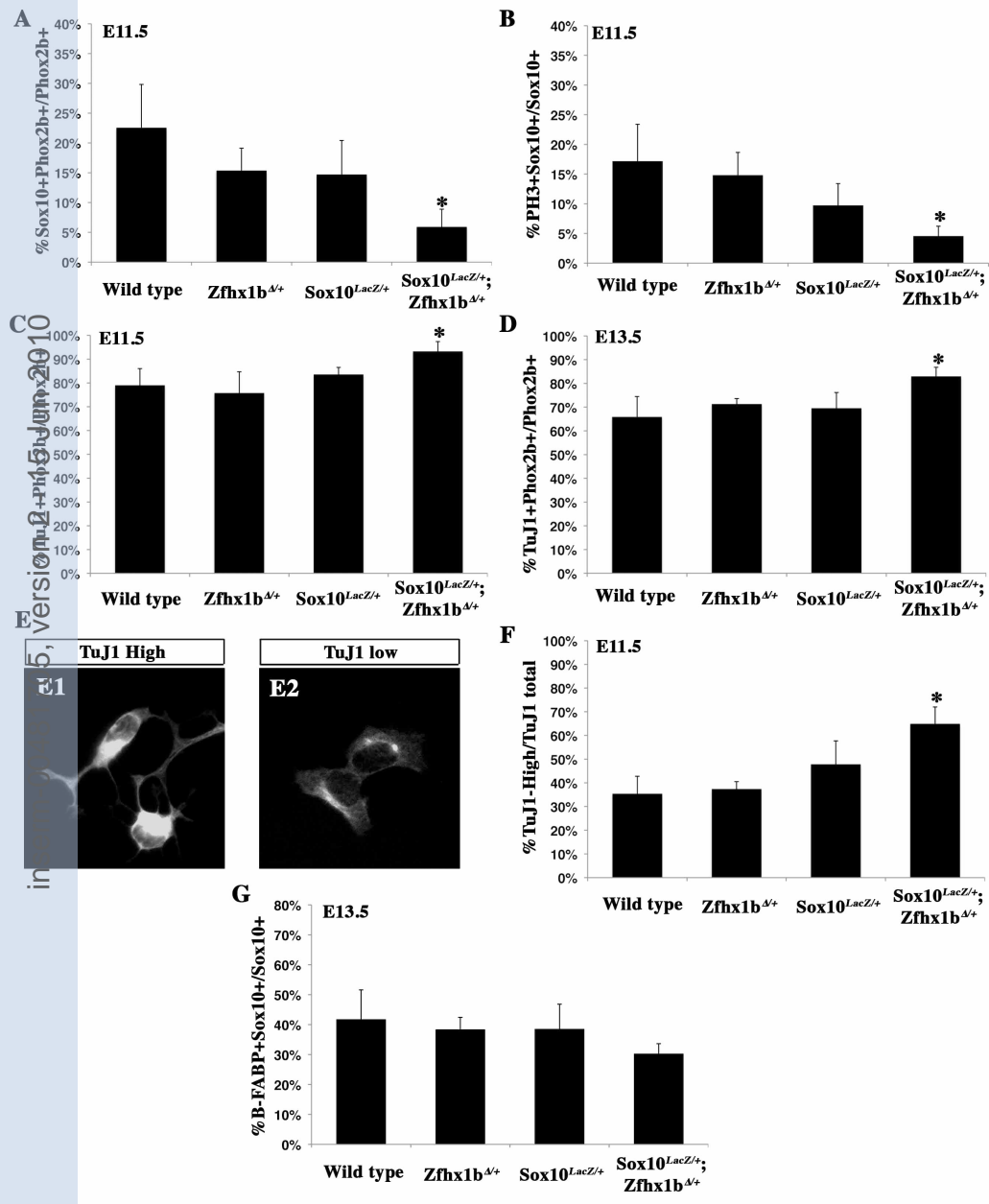
B5**B6**

Tail

hl

hl

Wild Type**Zfhx1b^{Δ/+}****Sox10^{LacZ/+}****Sox10^{LacZ/+};Zfhx1b^{Δ/+}****C****C1****C2****C3****C4**



Sox10^{LacZ/+}

Sox10^{LacZ/+};Zfhx1b^{Δ/+}

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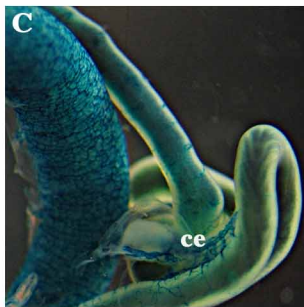
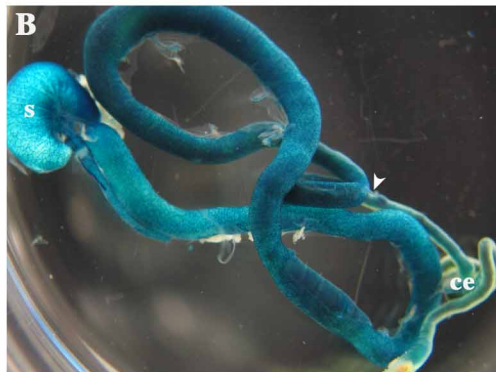
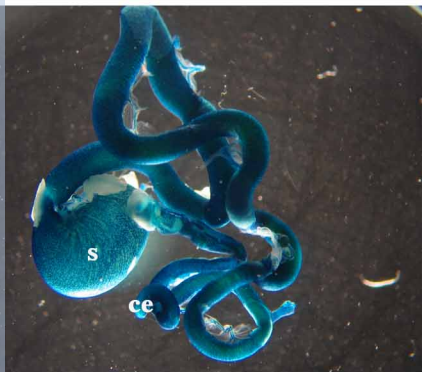


Table 1: Genotypes distribution and viability analysis of animals resulting from Sox10^{LacZ/+} and Zfhx1b^{Δ/+} crosses.

Genotypes	Number of animals genotyped	Number of animals dead between P0 and 4 weeks	Number of animals dead between 4 and 6 weeks	% of mortality over total period
Sox10 ^{+/+} ;Zfhx1b ^{+/+}	14	0	0	0%
Sox10 ^{LacZ/+} ;Zfhx1b ^{+/+}	13	1	0	8%
Sox10 ^{+/+} ;Zfhx1b ^{Δ/+}	10	0	0	0%
Sox10 ^{LacZ/+} ;Zfhx1b ^{Δ/+}	10	7	3	100%

Pups mortality was quantified by identifying all animals post mortem or at weaning (number of animals genotyped) and counting the number of animals dead between P0 and 4 weeks or P0 and 6 weeks.