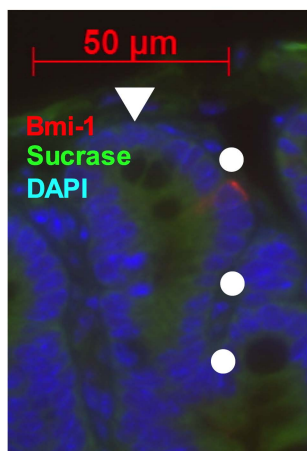
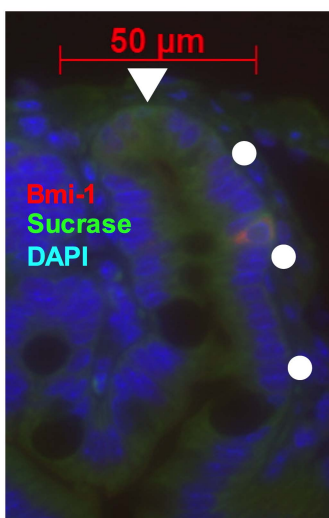
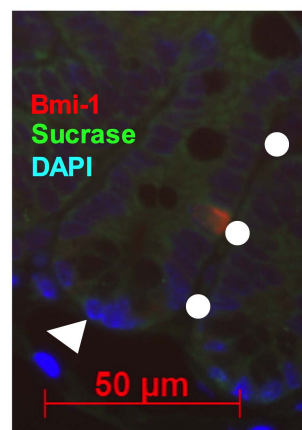
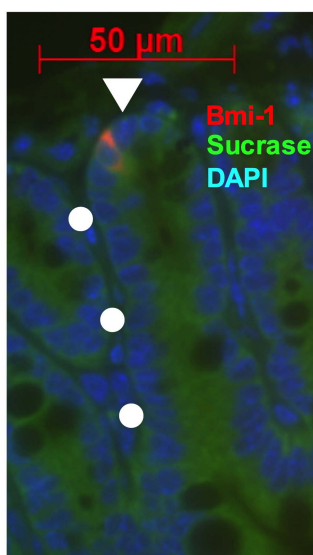
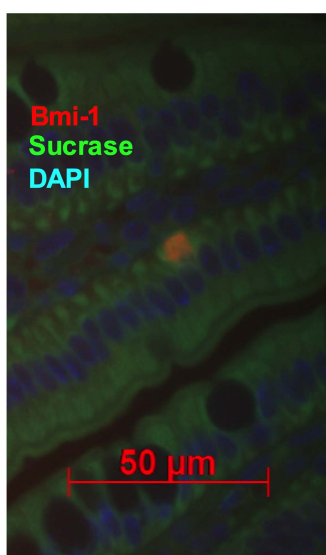
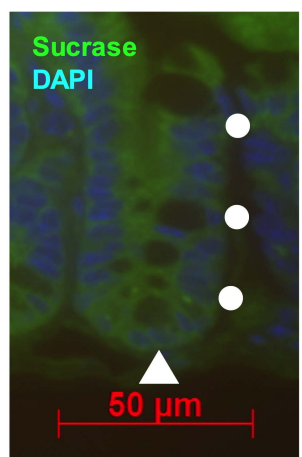
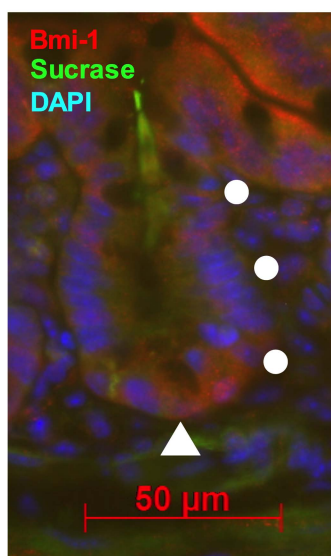
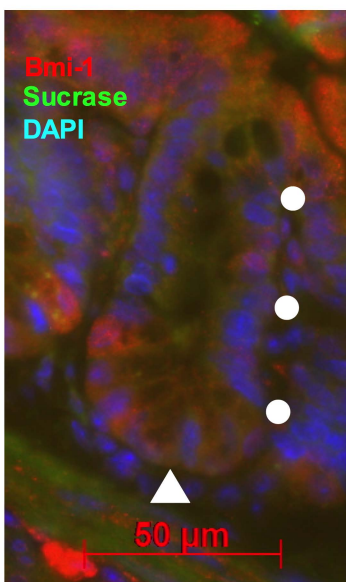
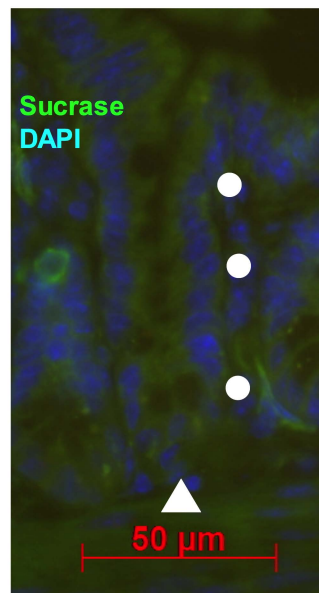
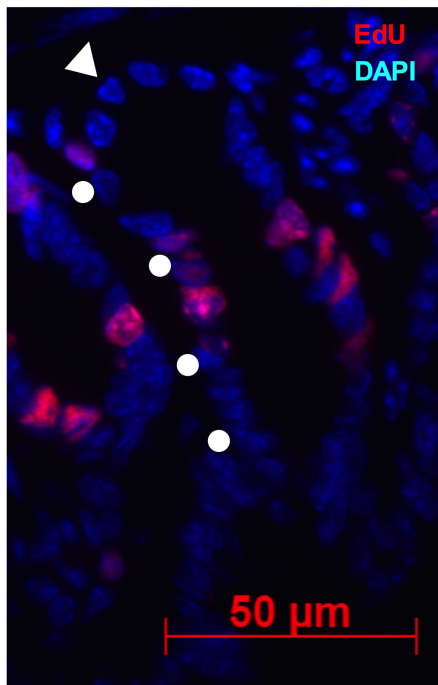
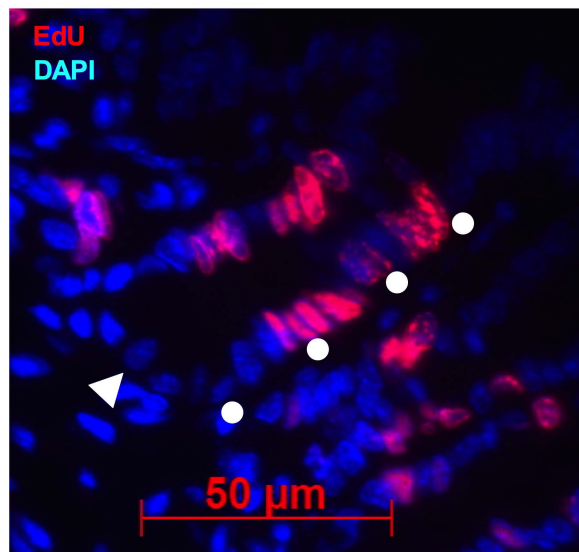
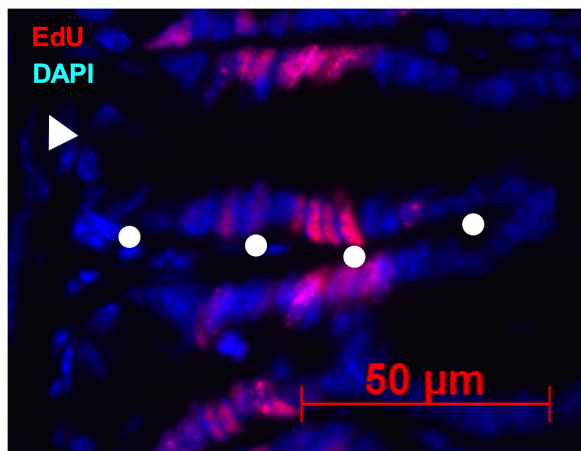
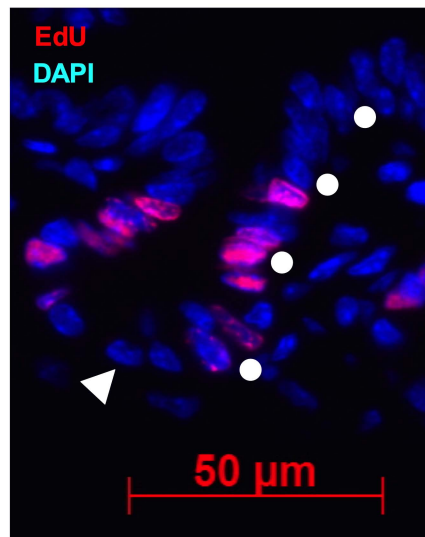
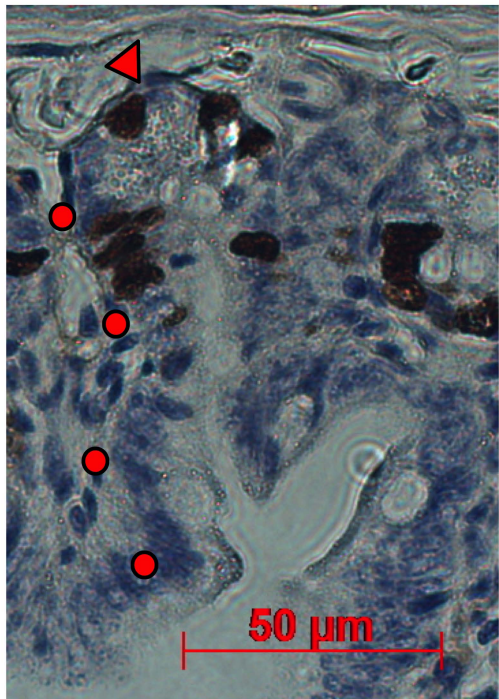
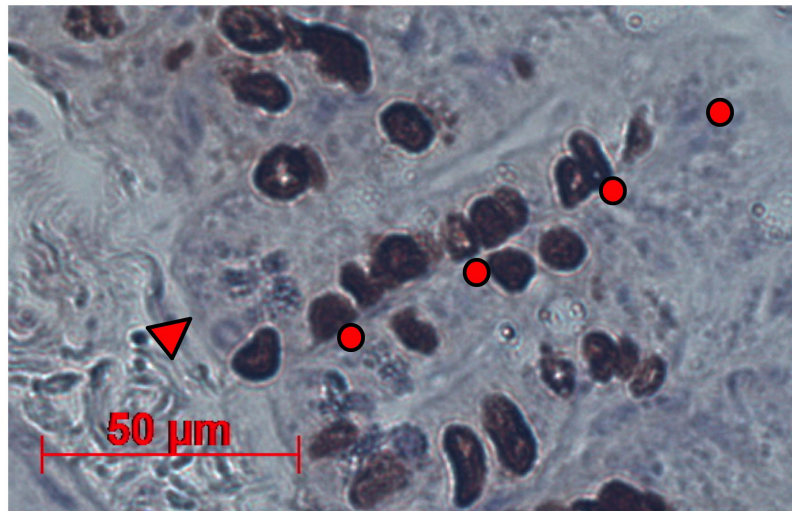
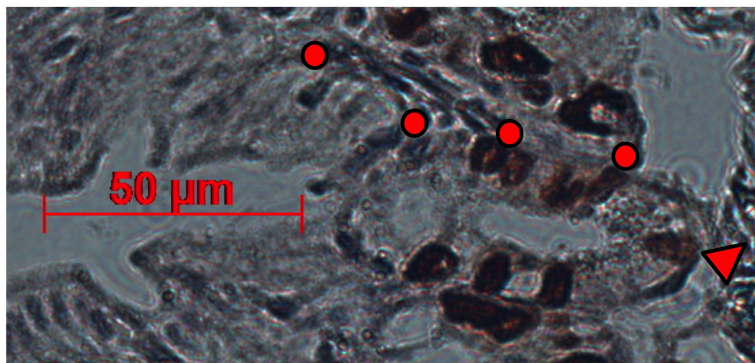
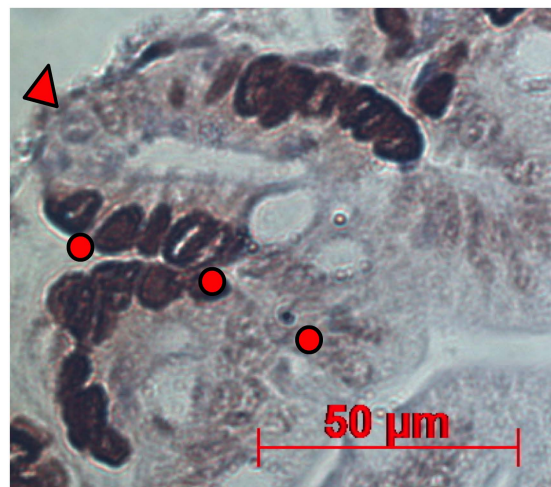
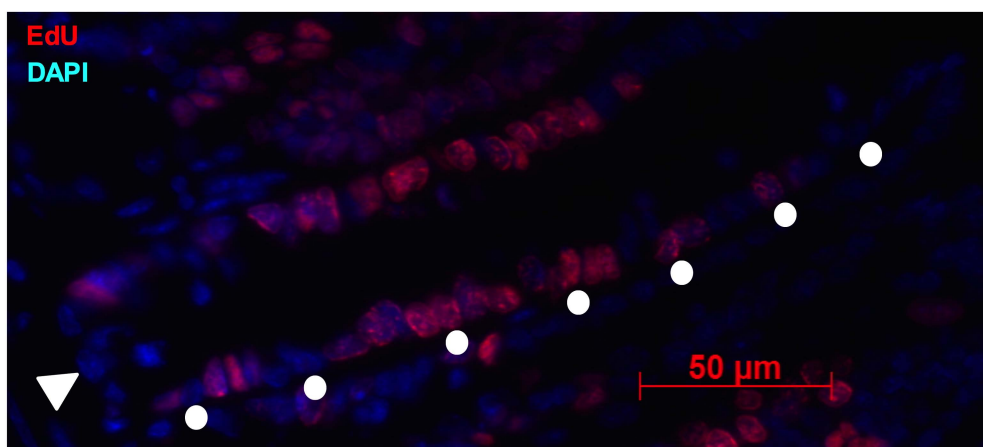
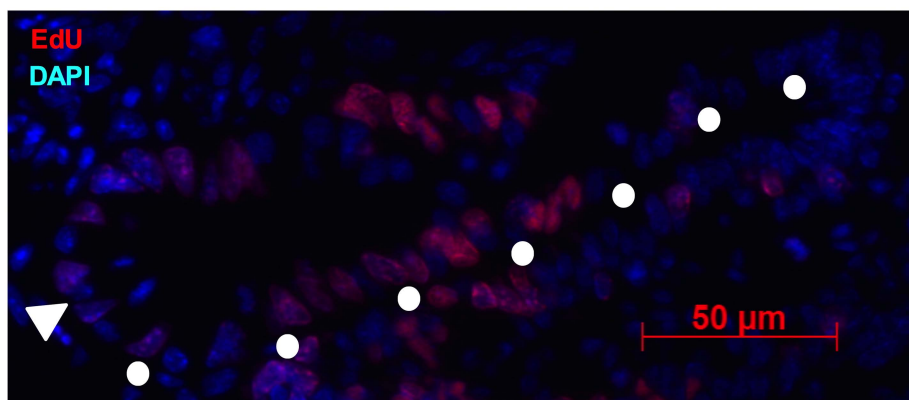
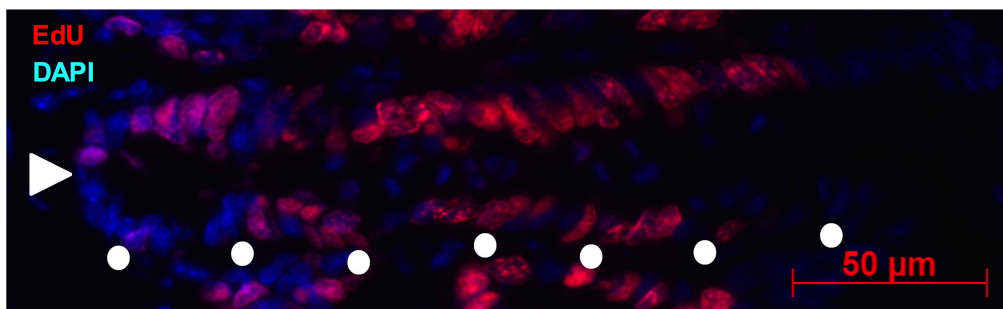
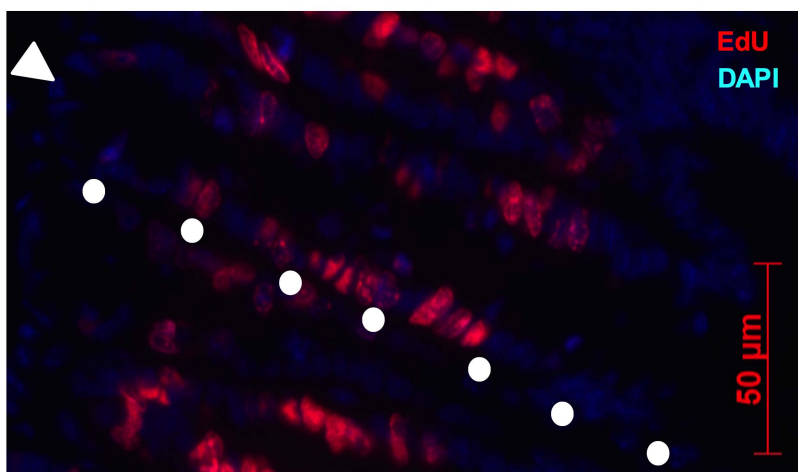


**A****B****C****D****E****F****G****H****I**

**A****B****C****D**

**A****B****C****D**

**A****B****C****D**

**Supplemental Table 1**

<b><u>Transcript</u></b>	<b><u>Mean raw Ct obtained for mice used to normalize data</u></b>
<b>Bax</b>	<b>23</b>
<b>Bcl2</b>	<b>31</b>
<b>Bmi-1</b>	<b>33</b>
<b>eGFP</b>	<b>25</b>
<b>Lgr5</b>	<b>32</b>
<b>Lrig1</b>	<b>33</b>
<b>Hopx</b>	<b>25</b>
<b>DCAMKL-1</b>	<b>32</b>
<b>Msi-1</b>	<b>35</b>
<b>Notch1</b>	<b>34</b>
<b>Noggin</b>	<b>30</b>

### **Supplemental Figure Legends**

**Supplemental Figure 1:** Representative photomicrographs of jejunal sections immunostained for Bmi-1 (red) and sucrase-isomaltase (green); DAPI (blue) staining indicates the nuclei. (**A-F**) Formalin-fixed, paraffin-embedded sections; (**F**) negative control. Note that (**E**) shows a villus rather than a crypt. (**G-I**) Fresh-frozen fixed sections; (**I**) negative control. Cell position 1 is indicated by the white triangle, and every 5th cell up to cell position 15 is marked with a white circle.

**Supplemental Figure 2:** Representative photomicrographs of EdU-labelled jejunal crypts from Bmi-1<sup>+/+</sup> and Bmi-1<sup>eGFP/+</sup> mice treated with vehicle or h(Gly<sup>2</sup>)GLP-2 at t = - 6 and -3 hr and with EdU at t = -1 hr, prior to sacrifice; DAPI (blue) staining indicates the nuclei. Bmi-1<sup>+/+</sup> vehicle-treated (**A**), Bmi-1<sup>+/+</sup> h(Gly<sup>2</sup>)GLP-2-treated (**B**), Bmi-1<sup>eGFP/+</sup> vehicle-treated (**C**), and Bmi-1<sup>eGFP/+</sup> h(Gly<sup>2</sup>)GLP-2-treated (**D**) mice. Cell position 1 is indicated by the white triangle, and every 5<sup>th</sup> cell up to cell position 20 is marked with a white circle.

**Supplemental Figure 3:** Representative photomicrographs of BrdU-labelled jejunal crypts from Bmi-1<sup>+/+</sup> and Bmi-1<sup>eGFP/+</sup> mice treated with vehicle or h(Gly<sup>2</sup>)GLP-2 for 10 d and then with additional treatment on d11 at t = -3 hr, as appropriate, and BrdU at t = -1 hr, prior to sacrifice. Bmi-1<sup>+/+</sup> vehicle-treated (**A**), Bmi-1<sup>+/+</sup> h(Gly<sup>2</sup>)GLP-2-treated (**B**), Bmi-1<sup>eGFP/+</sup> vehicle-treated (**C**), and Bmi-1<sup>eGFP/+</sup> h(Gly<sup>2</sup>)GLP-2-treated (**D**) mice. Cell position 1 is indicated by the red triangle, and every 5<sup>th</sup> cell up to cell positions 15 or 20 is marked with a red circle.

Supplemental Figure 4: Representative photomicrographs of EdU-labelled jejunal crypts from Bmi-1<sup>+/+</sup> and Bmi-1<sup>eGFP/+</sup> mice treated with vehicle or h(Gly<sup>2</sup>)GLP-2 for 18 d, with exposure to 10 Gy irradiation on d 15. On the 19<sup>th</sup> day, mice received an additional treatment, as appropriate, at t = -3 hr, as well as EdU at t = -1 hr, prior to sacrifice; DAPI (blue) staining indicates the nuclei. Bmi-1<sup>+/+</sup> vehicle-treated (**A**), Bmi-1<sup>+/+</sup> h(Gly<sup>2</sup>)GLP-2-treated (**B**), Bmi-1<sup>eGFP/+</sup> vehicle-treated (**C**), and Bmi-1<sup>eGFP/+</sup> h(Gly<sup>2</sup>)GLP-2-treated (**D**) mice. Cell position 1 is indicated by the white triangle, and every 5<sup>th</sup> cell up to cell position 35 is marked with a white circle.