

## Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Live imaging of control and Dmc1<sup>-/-</sup> Puma<sup>-/-</sup> Noxa<sup>-/-</sup> oocytes.

File Name: Supplementary Movie 2

Description: Live imaging of embryos from control and Dmc1<sup>-/-</sup> Puma<sup>-/-</sup> Noxa<sup>-/-</sup> mothers.