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Activation of the Tor/Myc Signaling Axis in Intestinal Stem and Progenitor Cells affects Longevity, Stress Resistance and Metabolism in Drosophila

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ACCEPTED MANUSCRIPT

ACTIVATION OF THE TOR/MYC SIGNALING AXIS IN INTESTINAL STEM AND
PROGENITOR CELLS AFFECTS LONGEVITY, STRESS RESISTANCE AND
METABOLISM IN DROSOPHILA
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Germany
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Running title: TOR and Myc in intestinal stem cells
Key words: TOR, Myc, escargot, lifespan, metabolism, fruit fly
Abbreviations: AKH, adipokinetic hormone; CAFE, capillary feeding assay; DILP, Drosophila
insulin-like peptide; EB, enteroblast; EC, enterocyte; EE, enteroendocrine cell; EGFR, epiderma
growth factor receptor; ISC, intestinal stem cell; JAK/STAT, Janus kinase and signal transducer and
activator of transcription; PEPCK, phosphoenolpyruvate carboxykinase; ROS, reactive oxyger
species; Su(H), suppressor of hairless; S6K - kinase of S6 protein; TAG, triglycerides; TOR, target of
rapamycin; TSC, tuberous sclerosis complex; 4EBP, 4E binding protein.

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