

The role of intestinal TOR signaling in metabolic responses to bacterial infection



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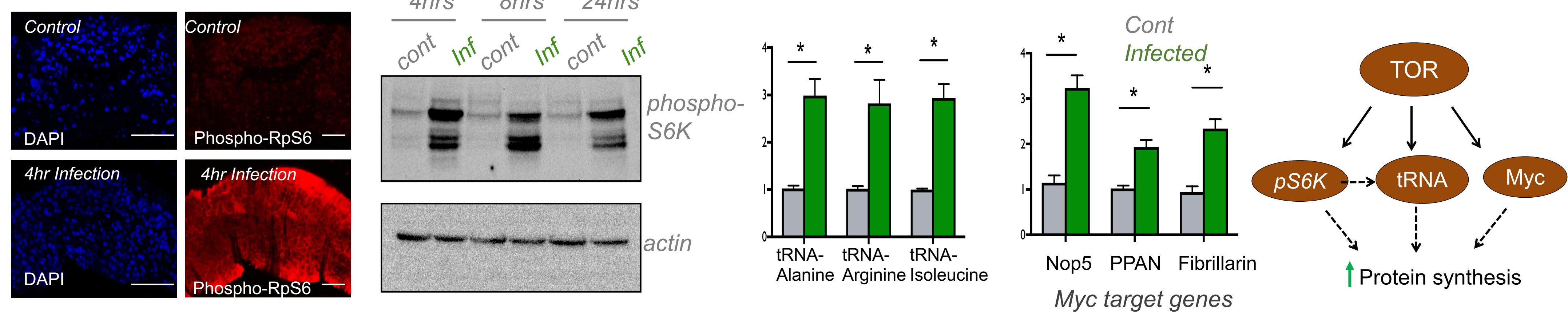


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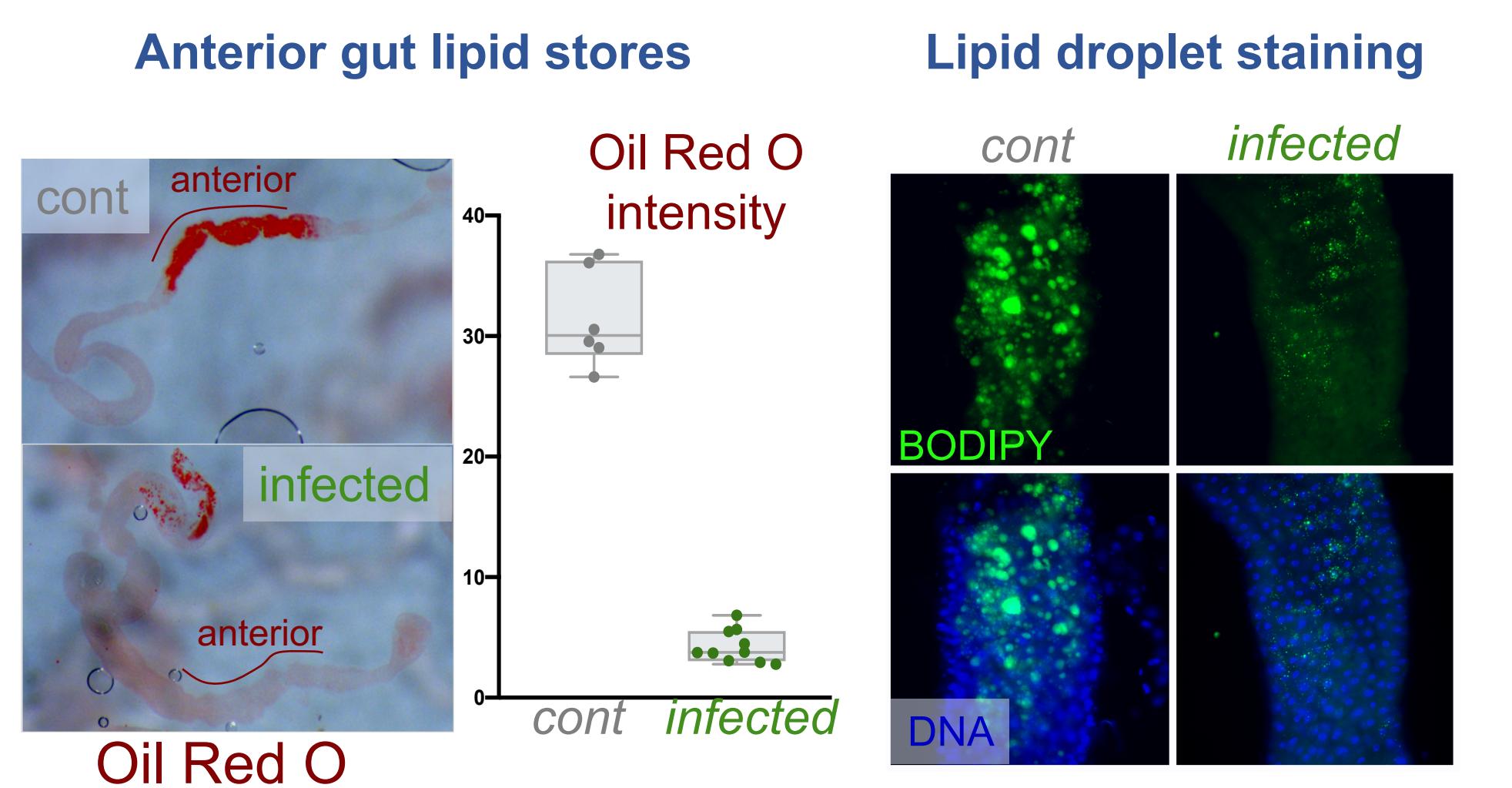
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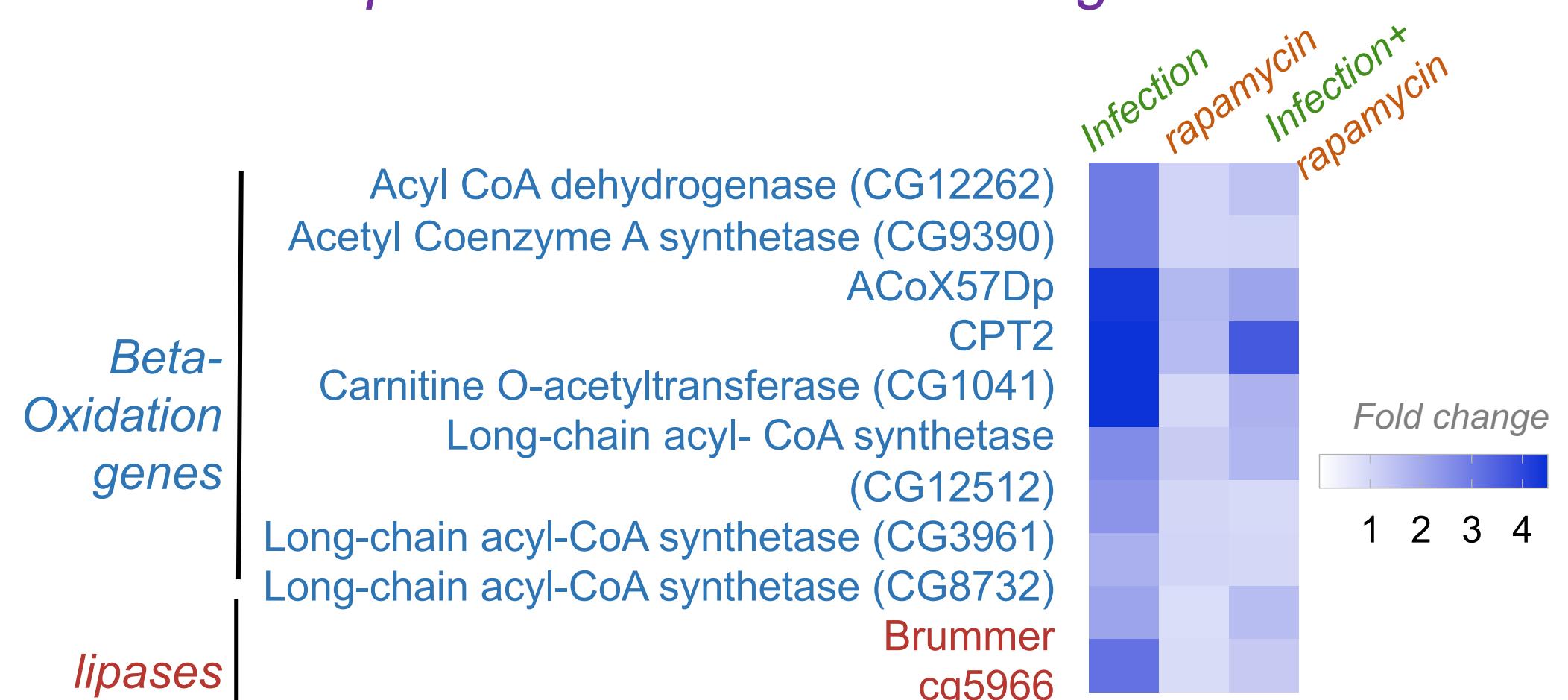
1. Oral gram-negative (*Pseudomonas entomophila*) bacterial infection increases TOR kinase signaling in the adult *Drosophila* intestine



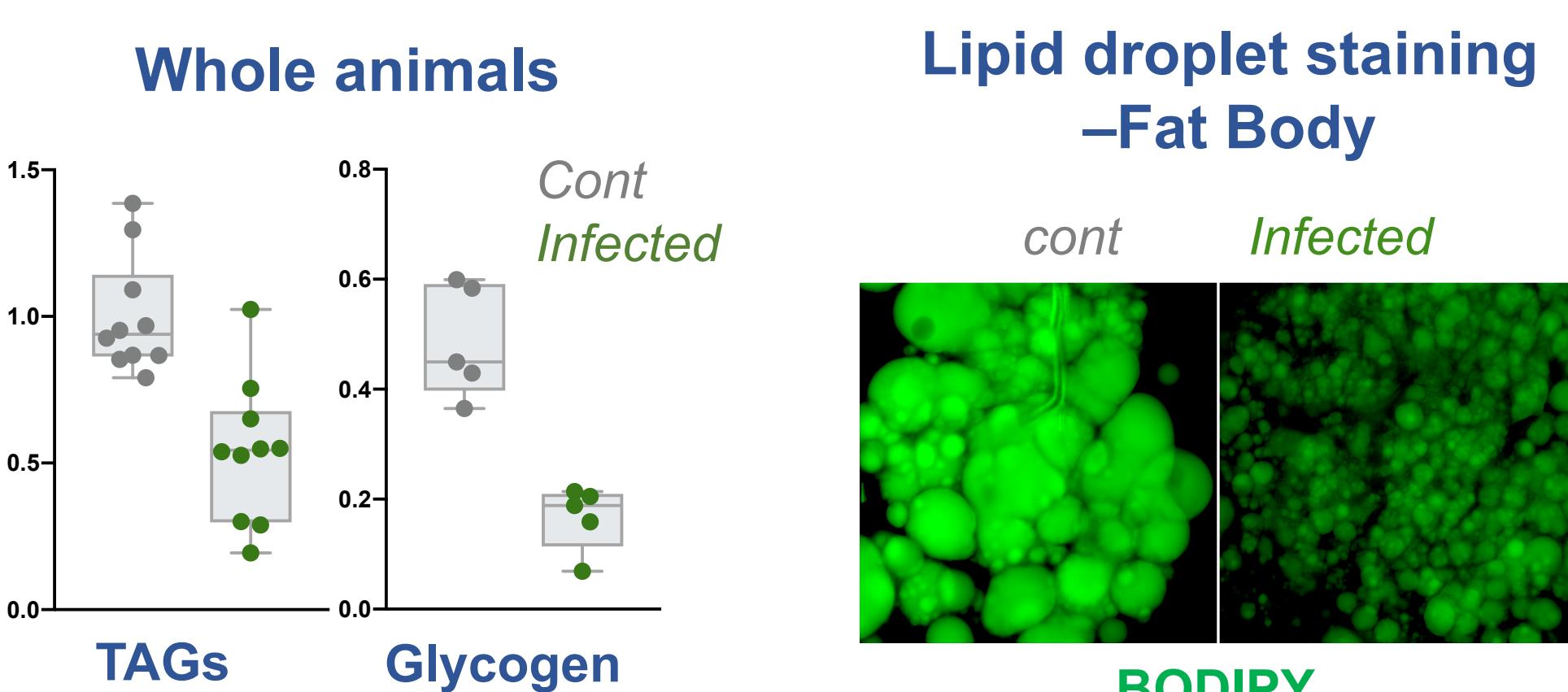
2. P.e. Infection reduces lipid stores in the gut



3. P.e. Infection induces TOR dependent upregulation of lipase and beta-Oxidation genes

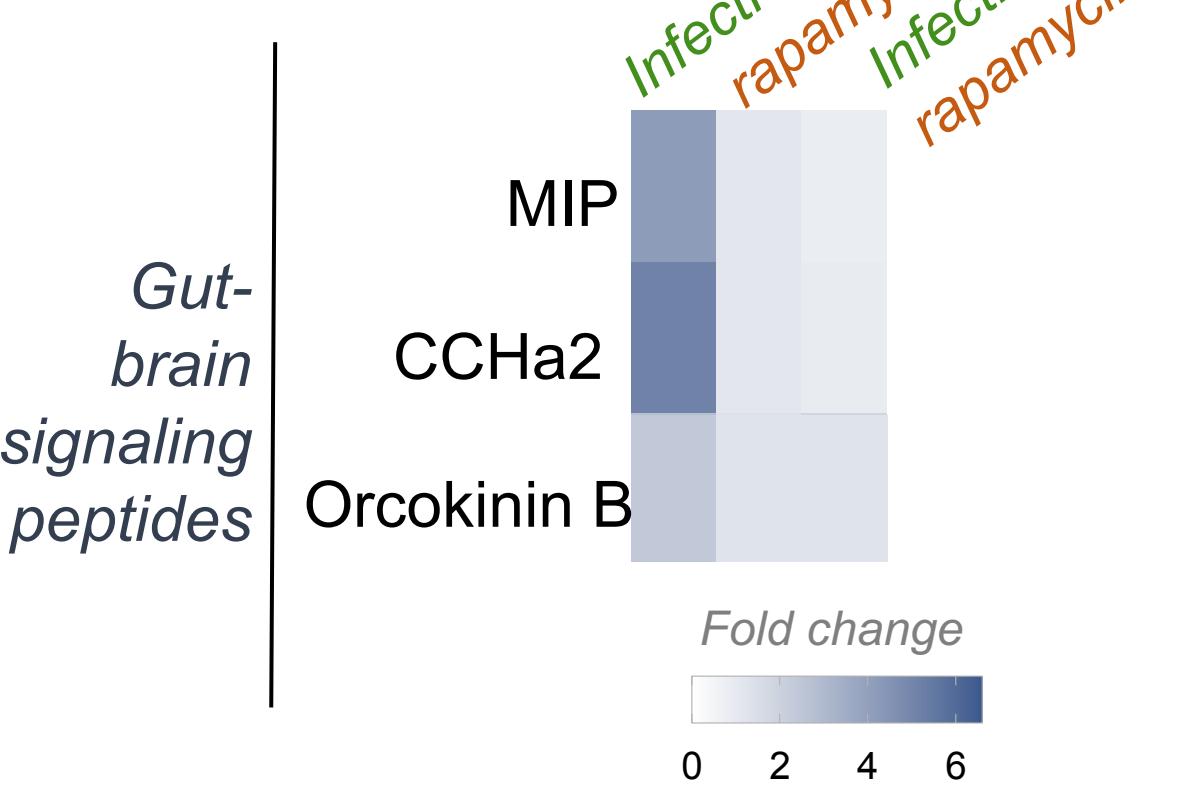


4. Oral intestinal P.e. infection reduces whole body energy stores and decreases fat body lipid droplet size



5. P.e. Infection induces TOR dependent upregulation of enteroendocrine signaling peptides

- Enteroendocrine signaling peptides are released from the secretory enteroendocrine cells in the adult *Drosophila* gut.
- These regulatory peptides signal to the brain to activate systemic signaling pathways to regulate metabolism and animal physiology.



6. Working model

