**Table S1. Ant PC1 top 20 genes, ranked by loading value in descending order (0.099 – 0.063). For every gene, normalized expression values were highest in control samples and lowest in dead manipulated samples. Column “Homolog” refers to presence of a homolog between the current C. floridanus assembly and proteins annotated in de Bekker et al. (2015) with similar RNAseq normalized expression patterns to our study. Comments related to putative functions are from Uniprot (Bateman 2019) and Interpro (Finn et al. 2017).**

|  |  |  |  |
| --- | --- | --- | --- |
| **BLAST** | **PFAM** | **Homolog** | **Comments** |
| uncharacterized LOC105257597 | PF00026|Eukaryotic aspartyl protease, PF00026|Eukaryotic aspartyl protease | no | Lysosome activity |
| protein CREG1 | PF13883|Pyridoxamine 5'-phosphate oxidase | no | Control of cell growth and apoptosis |
| lysosomal aspartic protease | PF00026|Eukaryotic aspartyl protease | yes | Lysosome activity |
| myogenesis-regulating glycosidase-like | PF01055|Glycosyl hydrolases family 31 | no | Muscle related via interaction with IGF2, jaw adductors known to be hypercontracted and degraded |
| lysosomal aspartic protease | PF00026|Eukaryotic aspartyl protease | no | Lysosome activity |
| NA | NA | no |  |
| alpha-amylase 1 | PF00128|Alpha amylase, catalytic domain, PF02806|Alpha amylase, C-terminal all-beta domain | no | Starch catabolism, may suggest reduction in food intake |
| venom acid phosphatase Acph-1 | PF00328|Histidine phosphatase superfamily (branch 2) | no | Possibly a non-venom acid phosphatase associated with lysosomes, as *acph-1* is associated with venom glands absent in ant heads |
| NA | NA | no |  |
| regucalcin | PF08450|SMP-30/Gluconolactonase/LRE-like region | no | Modulates calcium dependent processes and signaling |
| alpha-amylase A-like | PF02806|Alpha amylase, C-terminal all-beta domain, PF00128|Alpha amylase, catalytic domain | yes | Starch catabolism, may suggest reduction in food intake |
| uncharacterized LOC105253145 | PF00135|Carboxylesterase family | no |  |
| venom acid phosphatase Acph-1-like | PF00328|Histidine phosphatase superfamily (branch 2) | no | Possibly a non-venom acid phosphatase associated with lysosomes, as *acph-1* is associated with venom glands absent in ant heads |
| uncharacterized LOC105250203 | PF07464|Apolipophorin-III precursor (apoLp-III) | yes | Fat body and lipid regulation, possibly link to starvation/hunger signaling |
| NA | NA | no |  |
| pheromone-binding protein Gp-9-like | PF01395|PBP/GOBP family | no | Odorant binding |
| troponin C-like | PF13499|EF-hand domain pair; PF13833|EF-hand domain pair | no |  |
| cytochrome P450 4g15-like | PF00067|Cytochrome P450 | no | Steroid synthesis |
| actin, muscle | PF00022|Actin | no | Muscle related, jaw adductors known to be hypercontracted and degraded |
| uncharacterized LOC105258464 | PF01395|PBP/GOBP family | no | Odorant binding |

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