

SUPPLEMENTARY MATERIAL

Primers used for PCR

Genotyping

cat-2(1112):

GGCAGAGTAGATTTCCAAAG

ATCTGAGGAATCCTATCCGCTGTCAAACCTTCTCCCTT

dop-4(ok1321):

GGGCTCAGGATAGAGATTG

TGGAGAATCAGCTCTATTGC

Promoter amplification

dop-4:

ATTACAAAAGCCCAGCCAG

TTTGATGTAGGCTAATTGCTG

Rescue transgenes

dop-4:

AATGTTGGCTTACGGGTC

CTATTCAATTGAAGTATTCGGCG

RNAi constructs

dop-4 sense:

GCTTTTTGGCCTGATGATGT

CTGGAAAATTTGGGGGATTT

dop-4 antisense

GCTTTTGGCCTGATGATGT

CTGGAAAATTTGGGGATTT

Supplementary Figure 1. Measurements of ASH calcium transient duration.

A-F) Average area under the curve for calcium imaging experiments. A) Area is not increased by food in responses to 2 mM CuCl₂. B) In wild type, the area in responses to 0.5 M glycerol is increased by both food and dopamine ($p < 0.0035$, Mann-Whitney rank sum test; $N \geq 7$). In *cat-2(e1112)* the area is unaffected by food. C) The area in response to 2 mM CuCl₂ is increased by exogenous dopamine in wild type and *dop-4(ok1321)* ($p < 0.0035$, Mann-Whitney rank sum test; $N \geq 8$). D) Nose touch responses are unaffected by dopamine and serotonin. E) In wild type, the area in post-chronic responses to 10 mM CuCl₂ is increased by both food and dopamine ($p < 0.01$, Mann-Whitney rank sum test; $N \geq 11$). In *cat-2(e1112)* the area is unaffected by food. F) In wild type, the area in post-chronic responses to 10 mM CuCl₂ is increased by both food and dopamine ($p < 0.05$, Mann-Whitney rank sum test; $N \geq 6$). In *cat-2(e1112)* the area is unaffected by food.

