

| A | | ♂ | | |
|--|--|---|---|---|
| ♀ | | | <i>tubGAL80</i> | Y |
| | | | no GFP expression | no GFP expression |
| | | | <i>cad-GFP exp</i> no <i>GFP^{nls} exp</i> | <i>cad-GFP exp</i> no <i>GFP^{nls} exp</i> |
| | | | <i>cad-GFP exp</i> no <i>GFP^{nls} exp</i> | MUTANT <i>cad-GFP exp</i> AND <i>GFP^{nls} exp</i> |
| | | | no GFP expression | MUTANT no GFP expression |
| <i>FM7h,w ; CyO</i> | | | | |
| <i>FM7h,w ; Ubi-DEcadherin + UAS-GFP^{nls}</i> | | | | |
| <i>NP7278^{ex1} ; Ubi-DEcadherin + UAS-GFP^{nls}</i> | | | | |
| <i>NP7278^{ex1} ; CyO</i> | | | | |

| B | | ♂ | | |
|--|--|---|---|--|
| ♀ | | | <i>tubGAL80 ; UAS-X</i> | Y ; UAS-X |
| | | | no GFP exp no X exp | no GFP exp no X exp |
| | | | <i>cad-GFP exp</i> no <i>GFP^{nls} exp</i> no X exp | <i>cad-GFP exp</i> no <i>GFP^{nls} exp</i> no X exp |
| | | | <i>cad-GFP exp</i> no <i>GFP^{nls} exp</i> no X exp | RESCUED MUT? <i>cad-GFP exp</i> AND <i>GFP^{nls} exp</i> AND X exp |
| | | | no GFP expression no X exp | RESCUED MUT? no GFP expression AND X exp |
| <i>FM7h,w ; CyO</i> | | | | |
| <i>FM7h,w ; Ubi-DEcadherin + UAS-GFP^{nls}</i> | | | | |
| <i>NP7278^{ex1} ; Ubi-DEcadherin + UAS-GFP^{nls}</i> | | | | |
| <i>NP7278^{ex1} ; CyO</i> | | | | |

Figure S3. Punnett square diagrams of crosses used to unambiguously identify *hnt*^{NP7278^{ex1}} mutant embryos. (A) Control cross of *FM7h,w*; *hnt*^{NP7278^{ex1}}; *Ubi-DEcadherin-GFP + UAS-GFP^{nls}*/ *CyO* females crossed to X-linked *tubGAL80* males. Here the only progeny with *GAL4 > UAS-GFP^{nls}* expression are hemizygous mutant males (solid green box). Other embryos express *Ubi-DEcadherin-GFP* (*Ubi-DE cadherin = cad-GFP*) as shown by boxes outlined in green. (B) In the rescue experiment, the same females are crossed to *tubGAL80* males that also carry an autosomal *UAS* reporter. Again, the only progeny to express *UAS-GFP^{nls}* are the *hnt*^{NP7278^{ex1}} mutant males (solid green box), which also co-express the *UAS-X* reporter and can be scored for rescue of the *hnt*^{NP7278^{ex1}} mutant phenotype.