



**Figure S4. Overexpression of *wnd* leads to an up-regulation of nuclear pMad.**

(A-C) Representative pictures of pMad immunoreactivity in nociceptors of controls (*ppk-GAL4 UAS-mCD8::GFP/+*), wild-type *wnd* OE (*ppk-GAL4 UAS-mCD8::GFP/UAS-wnd*) and kinase-dead *wnd* (*wnd<sup>KD</sup>*) OE (*ppk-GAL4 UAS-mCD8::GFP/UAS-wnd<sup>KD</sup>*). (A'-C') Split images for pMad signals. Scale bars represent 10  $\mu$ m. (D) Quantified data for normalized nuclear pMad immunoreactivity. The overexpression of wild-type *wnd* showed  $112 \pm 9\%$  increase of nuclear pMad signals, while that of kinase-dead version did not show a significant difference compared to controls.  $n = 12$  for each genotypes. \*\*\*  $p < 0.001$  (Steel's test versus control). Error bars represent standard error.