Supporting information

Table S1. Oligonucleotides used

Primer name	Sequence
Luc forward	GGGCTGGTTCCTGGAACAATTGC
Luc 500 reverse	GGGCGGAGTTCATGATCAGTGC
Fluc forward T7	TAATACGACTCACTATAGGGCCTGGTTCCTGGAACAATTGC
Fluc 500 reverse T7	TAATACGACTCACTATAGGGCGGAGTTCATGATCAGTGC
T7 complement	TAATACGACCACTATTAGGGC
T7 ssRNA 25 bp	AGTACCCCGAAATGTCCGTAAGCCCATTAGTGAGTCGTATTA
Pre let-7 forward T7	TAATACGACTCACTATAGGTGAGGTAGTAGGTTGTAT
Pre let-7 reverse	CCTCGGTAAGGTAGAAAAATTGCAT
Pre lin-4 forward T7	TAATACGACTCACTATAGGTCCCTGAGACCTCAAGTC
Pre lin-4 reverse	CTACCCGGAGAGCCCAGGT
AGO2 forward T7	TAATACGACTCACTATAGGGCCAACAAGGTGGCCATCAGC
AGO2 reverse T7	TAATACGACTCACTATAGGGCACCTTGTTGTTGTCCAGACG
Dicer-2 forward T7	TAATACGACTCACTATAGGGCATGCTGTACGCCACCAAGC
Dicer-2 reverse T7	TAATACGACTCACTATAGGGCATACCTTAAGACTCATCAGG

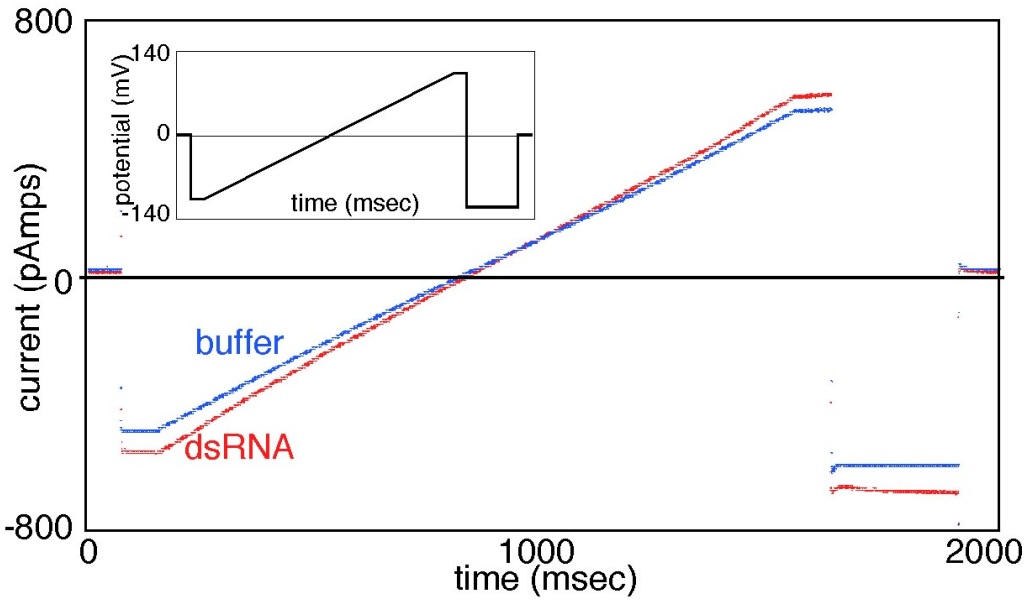
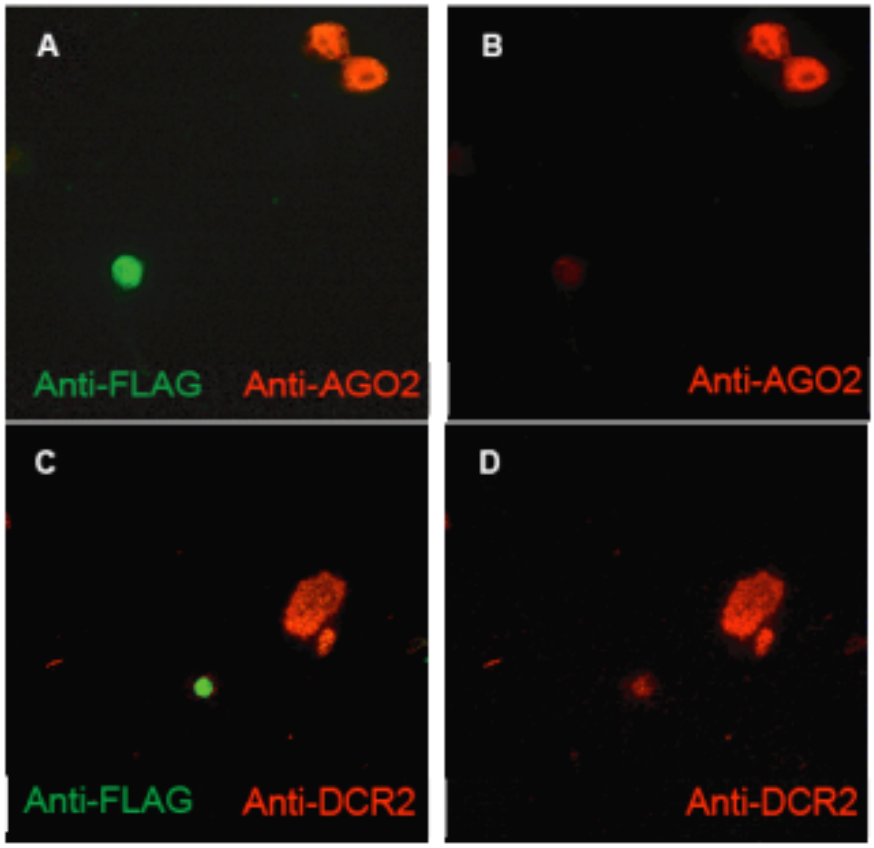


Figure S1. Voltage Ramp and current read of whole-cell patched S2 cell.
Whole cell patch current reads during voltage ramps (inset) of a *Drosophila* S2 cell expressing SID-1(WT) before (buffer) and after (dsRNA) dsRNA exposure. The voltage ramps started at 0 mV, dropped to -100 mV, ramped up to +100 mV, dropped to -120 mV, and reverted back to 0 mV. Each ramp was two seconds long, with five seconds between the start of each ramp.



"Figure S2. Antibody staining shows knockdown of AGO2 or DCR2 levels in cells co-transfected with SID-1::FLAG and dsRNA for AGO2 or DCR2. Panels A and B are the same image; panels C and D are the same image. Panels A and C have anti-FLAG staining; panels B and D do not. Note that cells with SID-1::FLAG staining (green) have reduced protein expression (red), while cells in the same image which do not have SID-1::FLAG staining have high protein expression. (**A, B**) *Drosophila* S2 cells co-transfected with SID-1::FLAG and AGO2 dsRNA were stained with anti-FLAG (green) and anti-AGO2 (red) antibody. (**C, D**) *Drosophila* S2 cells co-transfected with SID-1::FLAG and DCR2 dsRNA were stained with anti-FLAG (green) and anti-DCR2 (red) antiserum. "