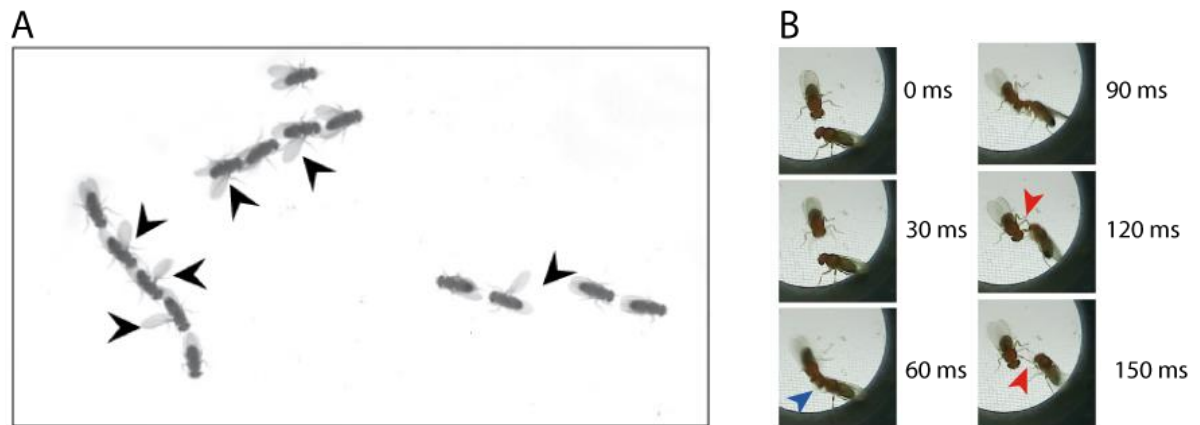


Supplementary Material



Supplementary Figure 1: Examples of manual video annotation A) Chaining *dnlg4LL01874/del* mutant males. Black arrows indicate wing extension, in this case directed towards another male. B) Excerpt from a recording, showing a male (upper left at time zero) pouncing (blue arrow) and attacking another male. After 90ms, the leg fencing (red arrows) is observed.

Supplementary Table 1: Expression levels of *dnlg2* and *dnlg4* determined by qPCR. Expression levels are normalised to *Rpl32* reference gene expression. w/o RT: without reverse transcriptase.

	<i>dnlg2</i> ^{K017} primer				<i>dnlg4</i> ^{LL01874/Def} primer			
	avr. ct	Δ ct	Δ Δ ct	2 ^{-Δ Δ ct}	avr. ct	Δ ct	Δ Δ ct	2 ^{-Δ Δ ct}
<i>CantonS</i>	25.82	8.17	0	100%	26.89	9.33	0.00	100%
<i>CantonS</i> w/o RT	40	0	-9.3	0%	40	0	-9.3	0%
<i>w¹¹¹⁸</i>	26.6	8.24	0.07	95.3%	27.82	9.53	0.2	87.3%
<i>w¹¹¹⁸</i> w/o RT	40	0	-9.3	0%	40	0	-9.3	0%
<i>dnlg</i>	25.25	10.07	1.9	26.9%	29.2	10.68	1.35	39.3%
<i>dnlg</i> w/o RT	40	0	-9.3	0%	40	0	-9.3	0%
<i>H₂O</i>	40	0	-9.3	0%	40	0	-9.3	0%

Supplementary Table 2: Overview of the primers used in the qRT PCR analysis.

SYMBOL	GENE	AMPLICON SIZE [BP]	ORDERING # / SEQUENCE
<i>RPL32</i>	Ribosomal protein L32	115	QT00985677
<i>DNLG2^{KO17}</i>	<i>Drosophila</i> neuroligin 2	147	5'-GACGAGGACCAACAGCACGAAAG-3' 5` GCATCGCCGTCATGGTTGGAC 3`
<i>DNLG4^{LL01874/DEF}</i>	<i>Drosophila</i> neuroligin 4	190	5` GCAGCAGCAGCAAGTGCCGCA 3` 5`- ATCTGCATCCACTGGTGTCCCATTGA 3`