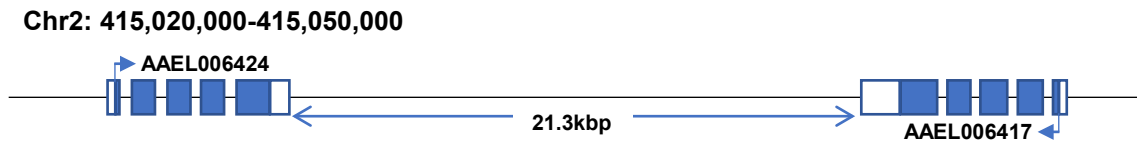
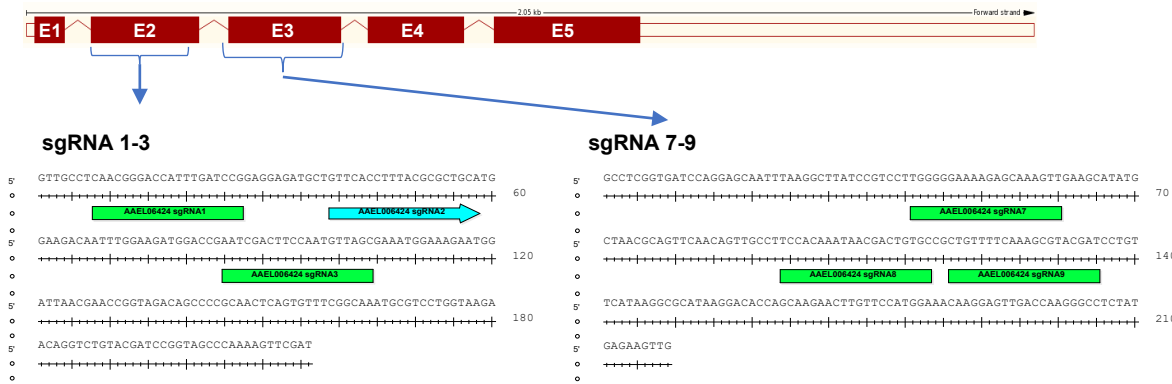


**A**



**B**

**D7L1- Aedes D7 Long 1 (AAEL006424): 321 aa = 36.895 kDa**

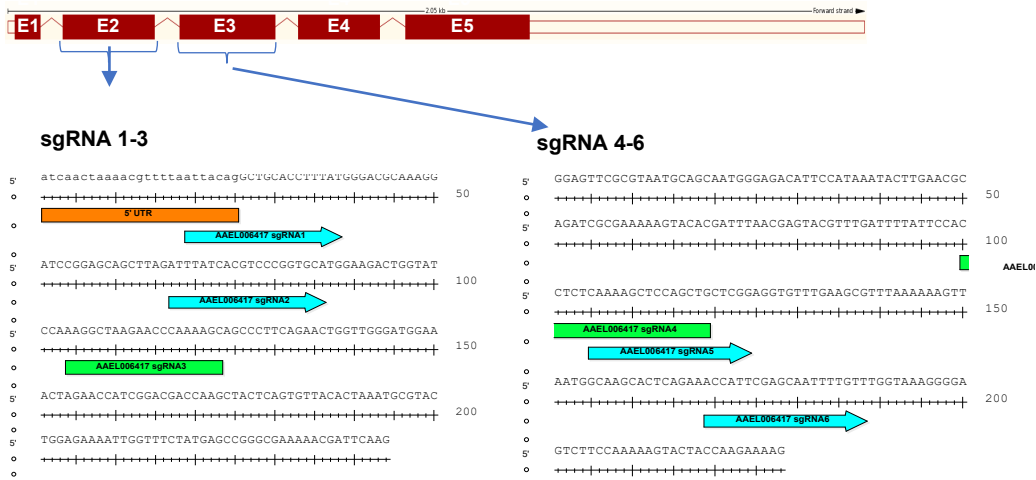


**C**

Name	Length	Exon	Strand	Nucleotide sequence 5'- T7-promoter-Gene specific (20mer) - Scaffold-F (CRISPR)- 3'	Target site	PAM
sgRNA6424-1	20	2	Minus	GAAATTAATACGACTCACTATAGGCGGATCAAATGGTCCCCTTGGTTTTAGAGCTAGAAATAGC	CGGATCAAATGGTCCC <b>GT</b> TG	AGG
sgRNA6424-2	20	2	Plus	GAAATTAATACGACTCACTATAGGGTTACACCTTACGCGCTGCA <b>GT</b> TTTTAGAGCTAGAAATAGC	GTTACACCTTACGCGCT <b>G</b> CA	TGG
sgRNA6424-3	20	2	Minus	GAAATTAATACGACTCACTATAGGGCTAACATTGGAAGTCGATT <b>GT</b> TTTAGAGCTAGAAATAGC	GCTAACATTGGAAGTC <b>G</b> ATT	CGG
sgRNA6424-7	20	3	Minus	GAAATTAATACGACTCACTATAGGCAGCTGGAGCTTTTGGAGAG <b>GT</b> TTTTAGAGCTAGAAATAGC	AACTTTGCTCTTTCC <b>CC</b> CA	AGG
sgRNA6424-8	20	3	Minus	GAAATTAATACGACTCACTATAGGGCACAGTCGTTATTTGGGA <b>GT</b> TTTTAGAGCTAGAAATAGC	GCACAGTCGTTATTT <b>G</b> TGGA	AGG
sgRNA6424-9	20	3	Minus	GAAATTAATACGACTCACTATAGGATCGTACGCTTTGAAAACAG <b>GT</b> TTTTAGAGCTAGAAATAGC	ATCGTACGCTTTGAAA <b>A</b> CAG	CGG
Scaffold-R				AAAAGCACCGACTCGGTGCCACTTTTTCAAGTTGATAACGGACTAGCCTTATTTAACTT <b>GCTATTCTAGCTCTAAAAC</b>		

**D**

**D7L2- Aedes D7 Long 2 (AAEL006417): 332 aa = 38.628 kDa**

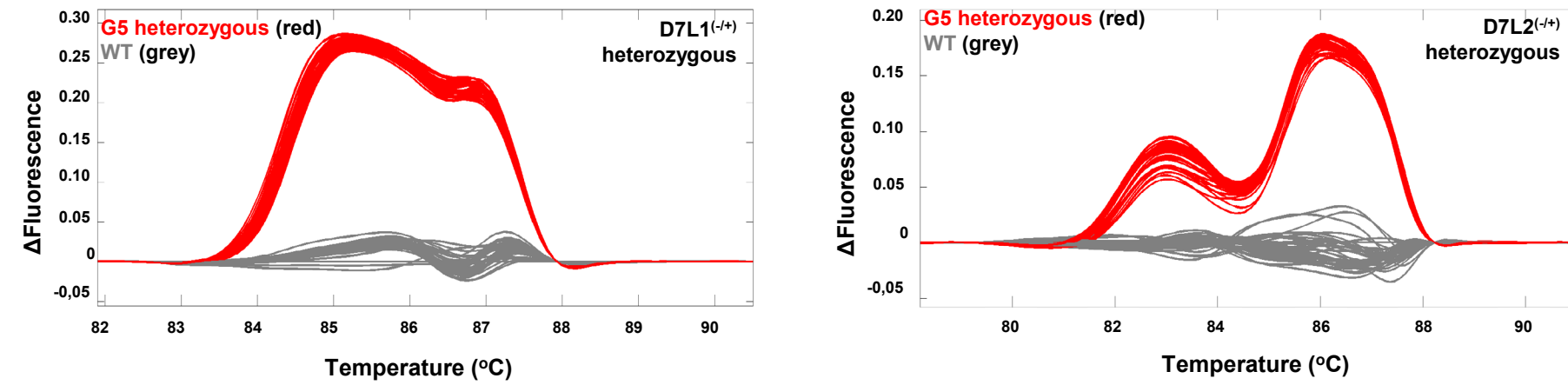


**E**

Name	Length	Exon	Strand	Nucleotide sequence 5'- T7-promoter-Gene specific (20mer) - Scaffold-F (CRISPR)- 3'	Target site	PAM
sgRNA6417-1	20	2	Plus	GAAATTAATACGACTCACTATAGGATTACAGGCTGCACCTTTAT <b>GT</b> TTTAGAGCTAGAAATAGC	ATTACAGGCTGCACCT <b>T</b> TAT	GGG
sgRNA6417-2	20	2	Plus	GAAATTAATACGACTCACTATAGGATTTATCACGTCGGGTGCA <b>GT</b> TTTAGAGCTAGAAATAGC	ATTTATCACGTCGGGT <b>G</b> CA	TGG
sgRNA6417-3	20	2	Minus	GAAATTAATACGACTCACTATAGGCTTTTGGGTTCTAGCCTT <b>GT</b> TTTAGAGCTAGAAATAGC	GCTTTGGGTTCTTAG <b>C</b> TT	TGG
sgRNA6417-4	20	3	Minus	GAAATTAATACGACTCACTATAGGCAGCTGGAGCTTTTGGAGAG <b>GT</b> TTTAGAGCTAGAAATAGC	CAGCTGGAGCTTTT <b>G</b> AGAG	TGG
sgRNA6417-5	20	3	Plus	GAAATTAATACGACTCACTATAGGCAAAGCTCCAGCTGCTCGG <b>GT</b> TTTAGAGCTAGAAATAGC	CAAAGCTCCAGCT <b>G</b> TCGG	AGG
sgRNA6417-6	20	3	Plus	GAAATTAATACGACTCACTATAGGACATTGAGCAATTTT <b>GT</b> TTTAGAGCTAGAAATAGC	ACCATTCGAGCAATTT <b>G</b> TT	TGG
Scaffold-R				AAAAGCACCGACTCGGTGCCACTTTTTCAAGTTGATAACGGACTAGCCTTATTTAACTT <b>GCTATTCTAGCTCTAAAAC</b>		

Supplemental Figure S2

A

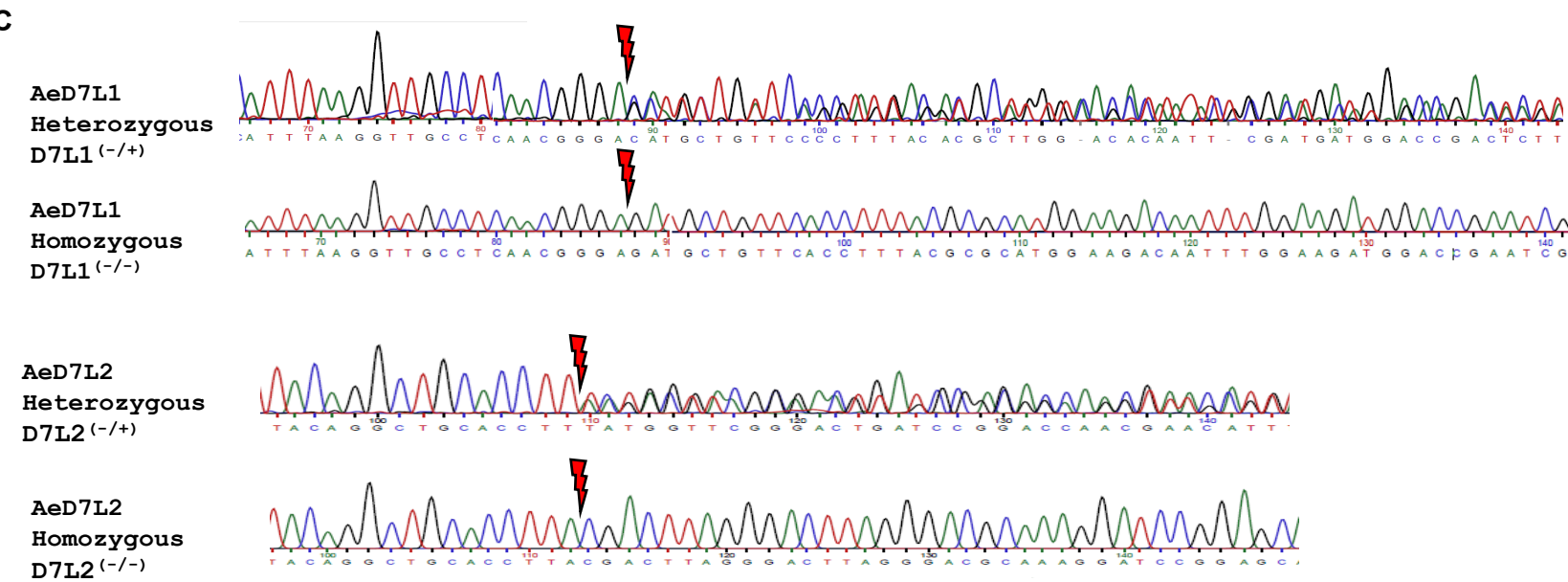


B

WT: ACACTTCGTTTCTTCAGAAACATTCTACCATTTAAGGTTGCCTCAACGGGACCATTGATCCGGAGGAGATGCTGTTACACCTTTACGCGTGCA TGGCAGACAATTTGGAAGATGGACCCAAATCTACTTCCAATGTAAGCACAATGGAAAGAATGGATTAA  
AeD7L1<sup>(-/-)</sup>: ACACTTCGTTTCTTCAGAAATATTCTACCATTTAAGGTTGCTTCAACGGGA-----GATGCTGTTACACCTTTACACGC---ATGGCAGACAATTTGGAAGATGGACCGAATCTACTTCCAATGTAAGCACAATGGAAAGAATGGATTAA

WT: CACTAAACGTTTTATTACAGGCTGCACCTT-----TATGGGTCGCATCGGATCCAGAGCAGCTTACATTTGTGCGGTCCCGGTGCA TGGAAAGACTGGTATCCA AAGGCTAAGAACCCTAAAGCAGCCCTTCAGAACTGGTTGGGATGGAAA  
AeD7L2<sup>(-/-)</sup>: CACTAAACGTTTTATTACAGGCTGCACCTTACGACTTCGGGTCTTA-GGGACGCAAAGGATCCGGAGTCGCTTACATTTATCACGTCCCGGTGCATGGAAAAGTGGTATCCAAA-----GAACCCAAAAGCAGCCCTTCAGAACTGGTTGGGATGGAAA

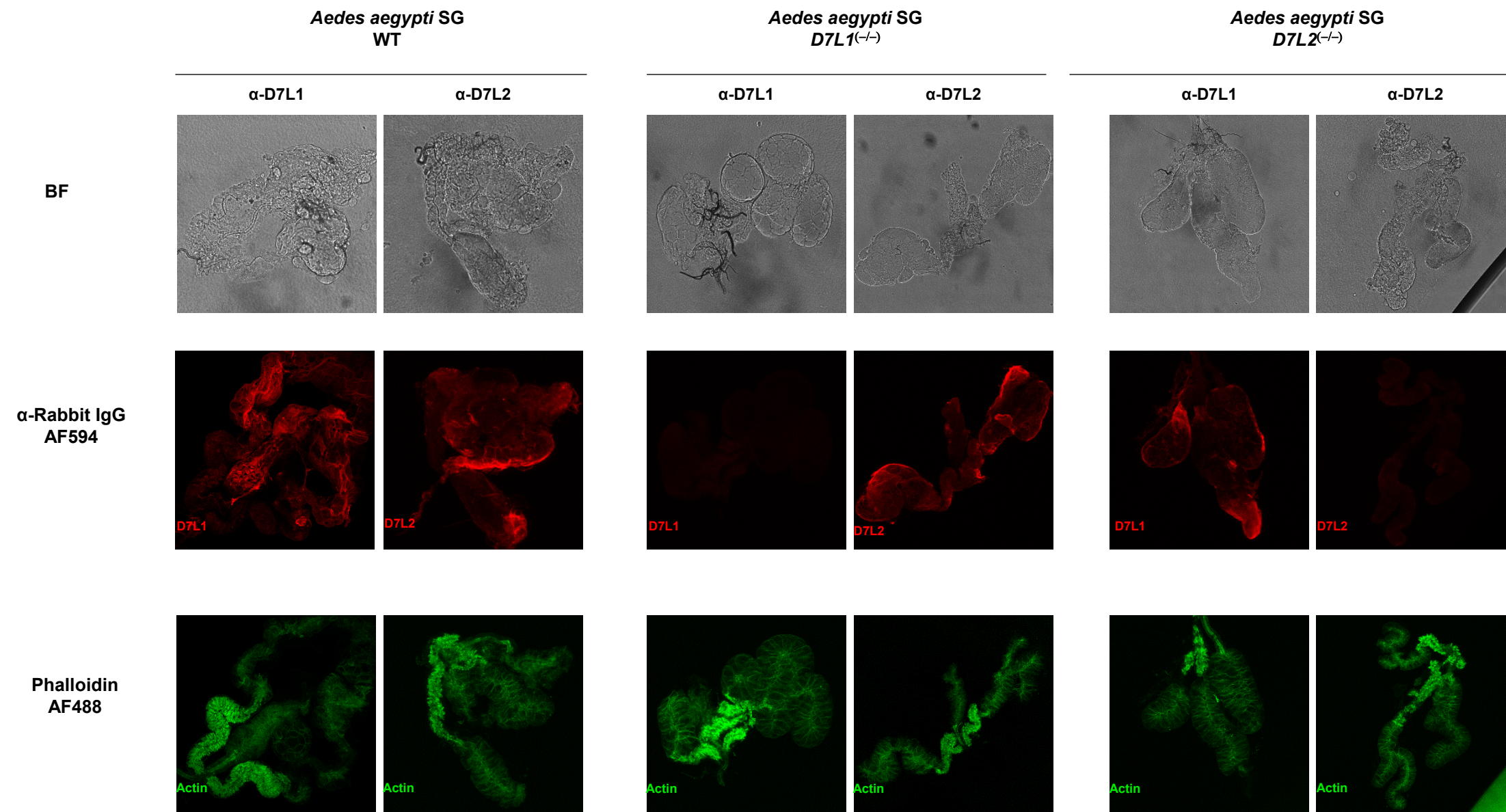
C

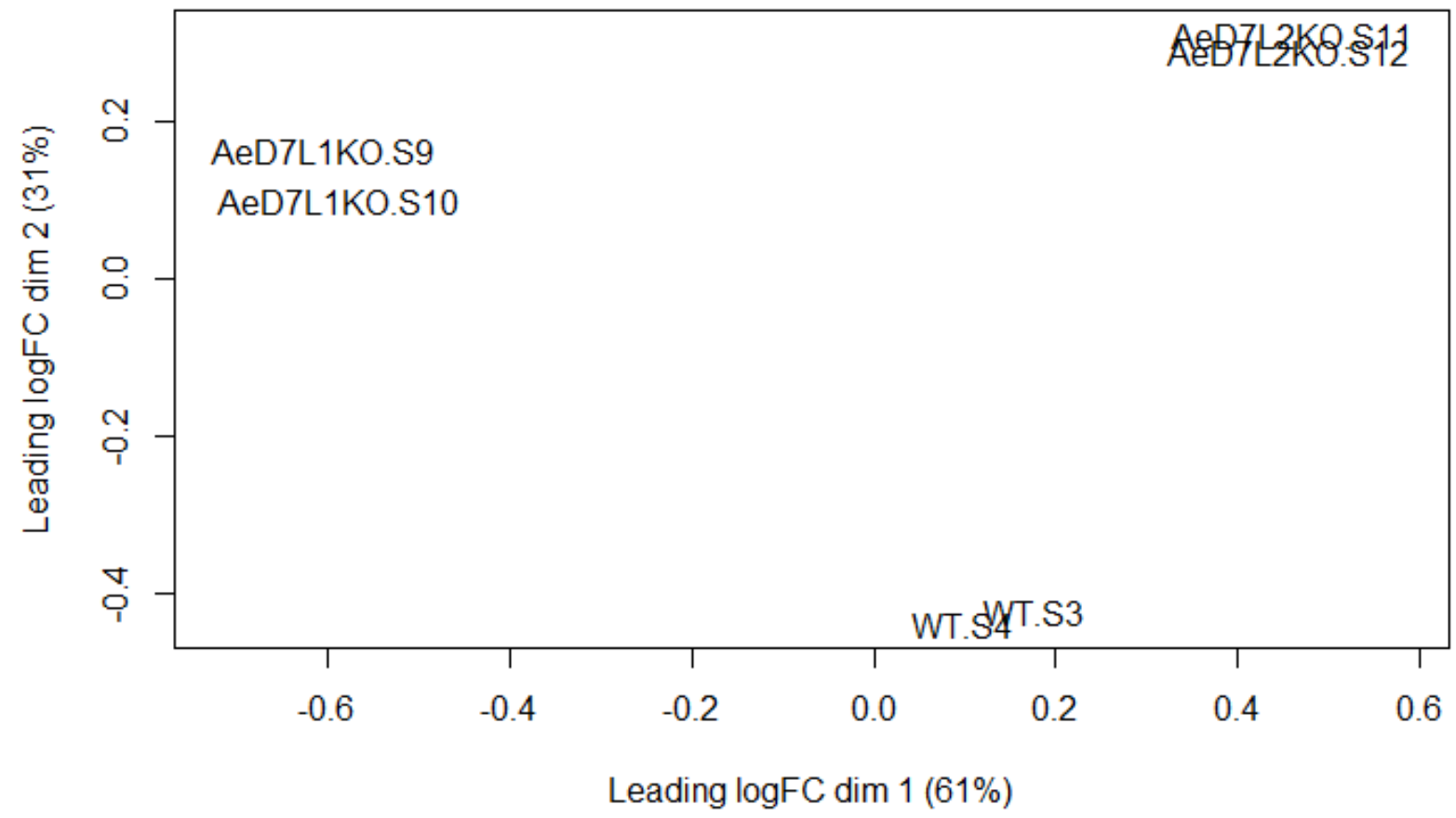


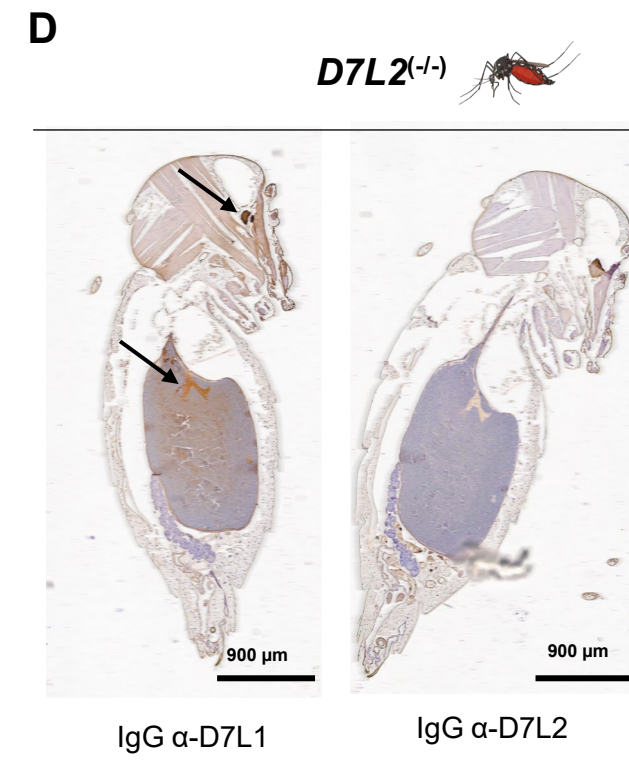
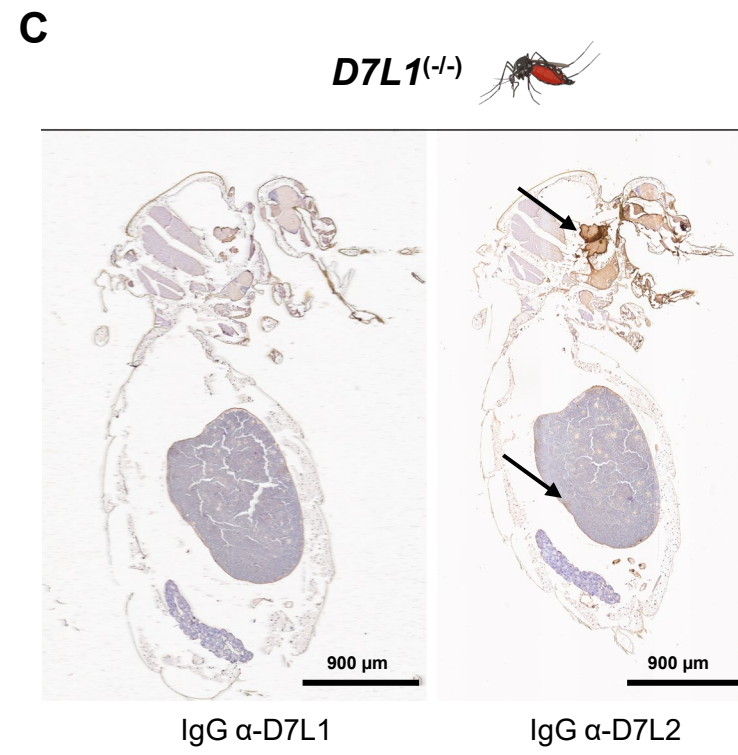
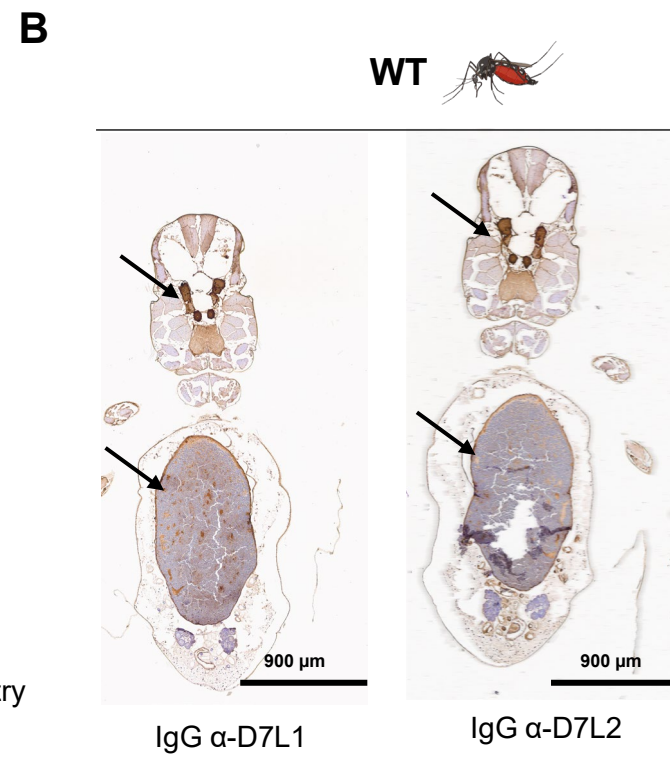
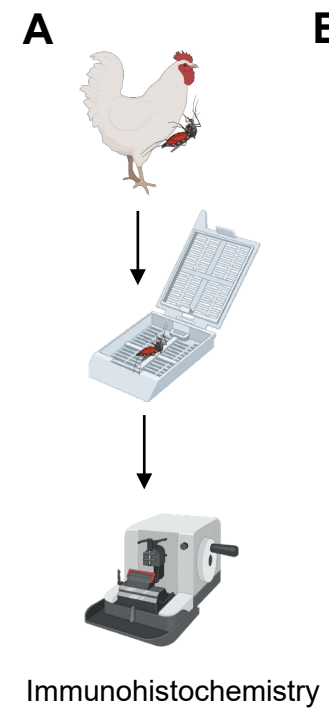
D

WT: VASTGPFDPPEMLFTFTRCMEDNLEDGPNRLPML  
D7L1<sup>(-/-)</sup>: VASTG**DAVHLYTHGRQFGRWTESTSNVSGMERMD**.

WT: AAPLWVASDPEQLTFVASRCMEDWYPKAKNPKAALQNWLGW  
D7L2<sup>(-/-)</sup>: AAP**YDFGS**.**GRKGSVAYIYHVPVHGKLVSKPEKSSPELV**

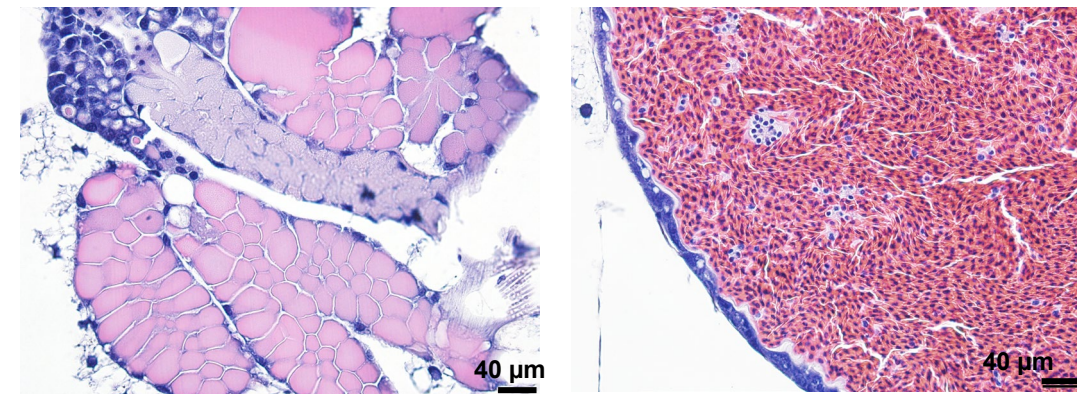
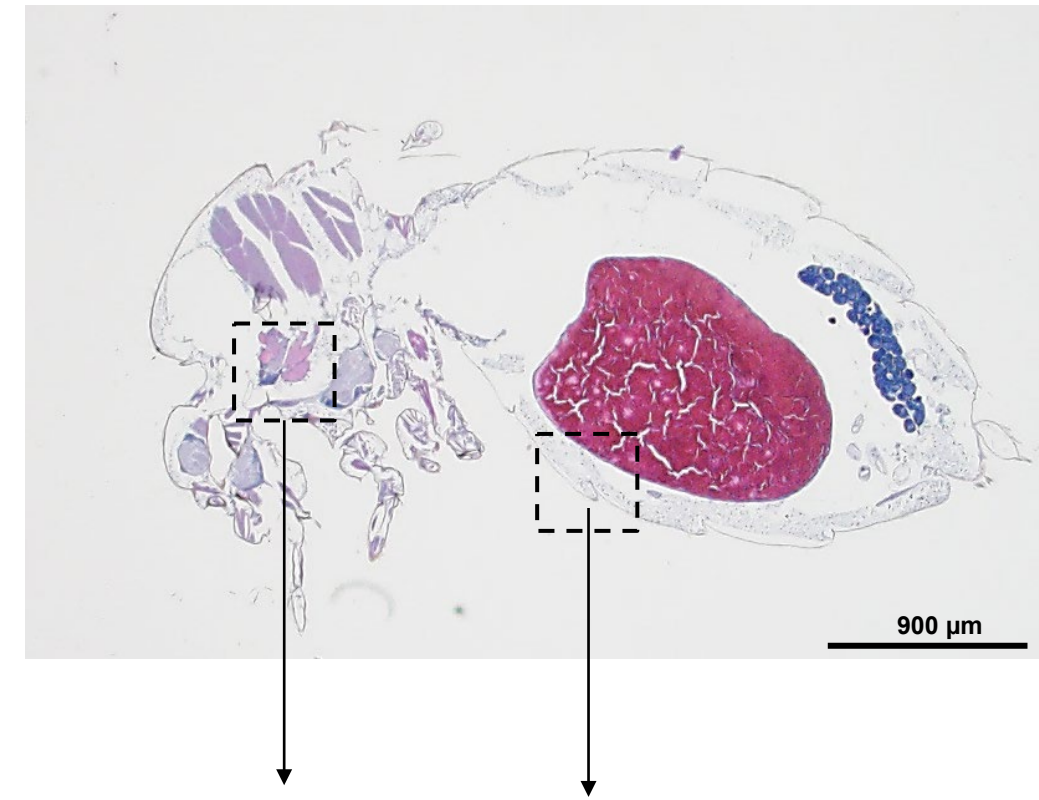






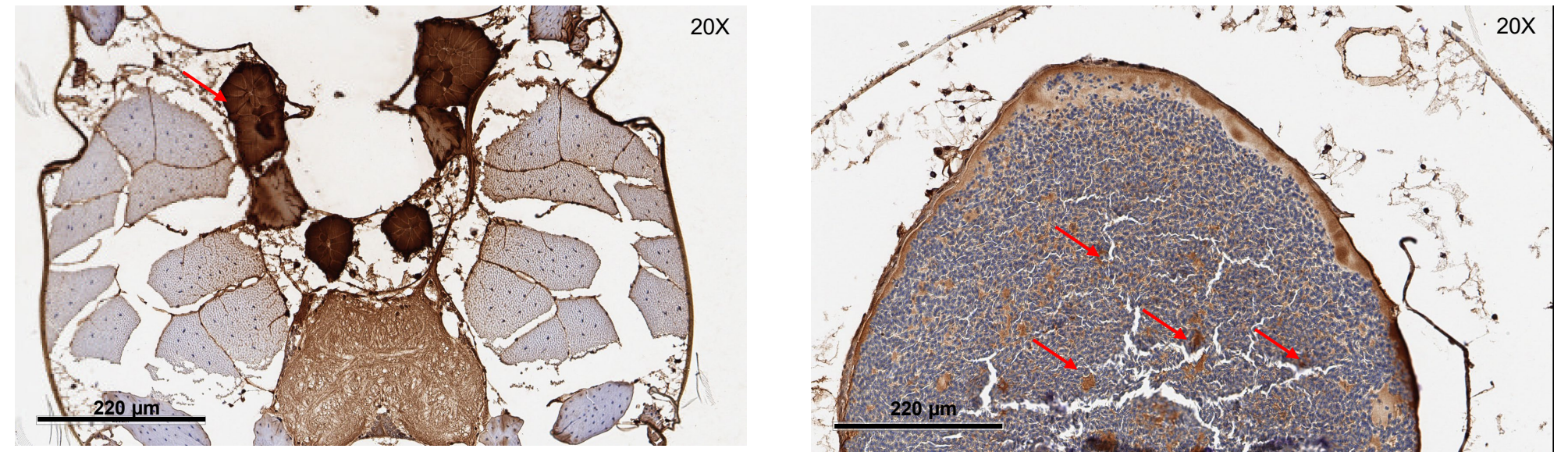
Supplemental Figure S6

A



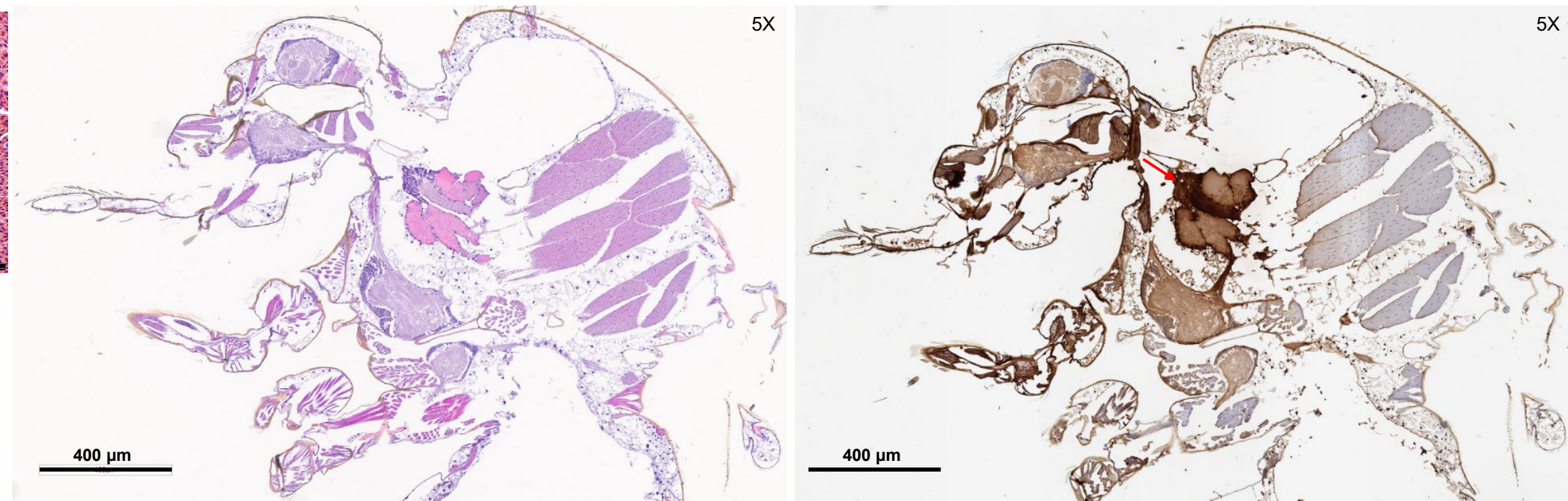
B

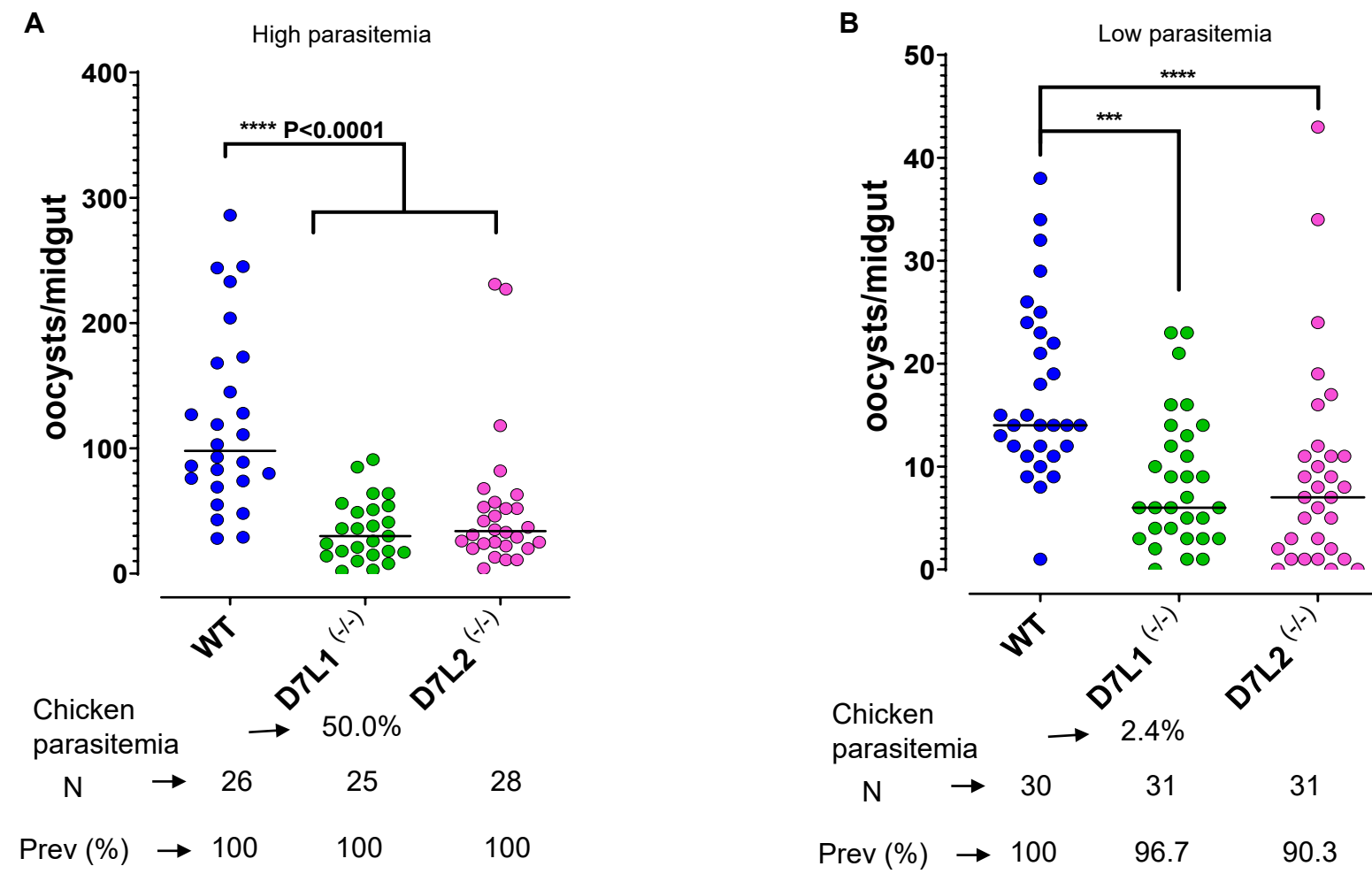
D7L1 in WT mosquitoes



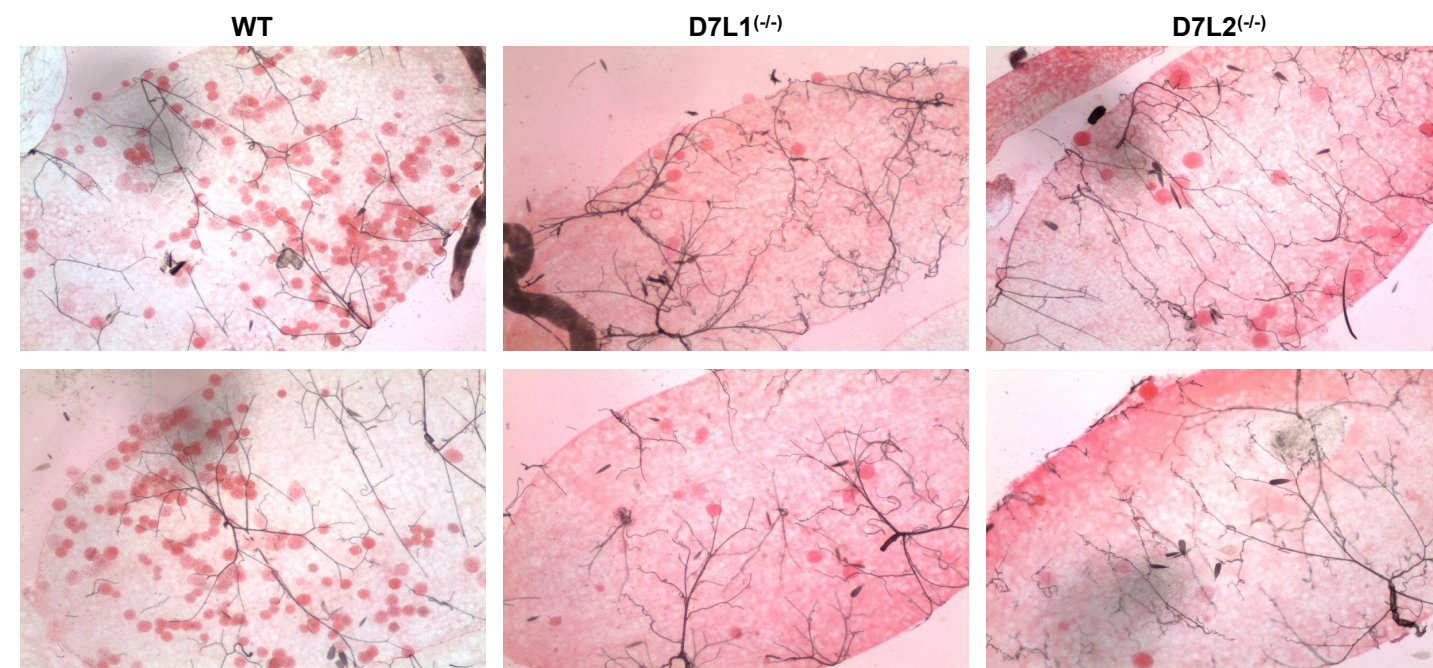
C

D7L2 in D7L1<sup>(-/-)</sup> mosquitoes





**C**



Supplemental Figure S8

