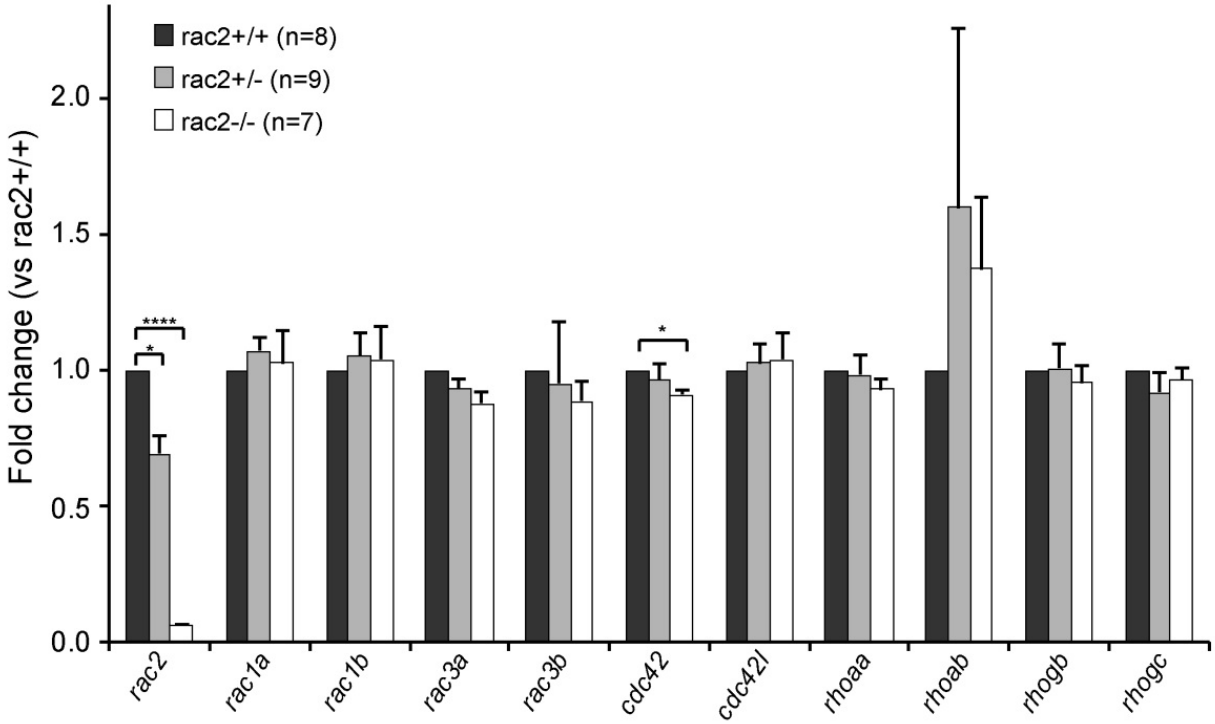
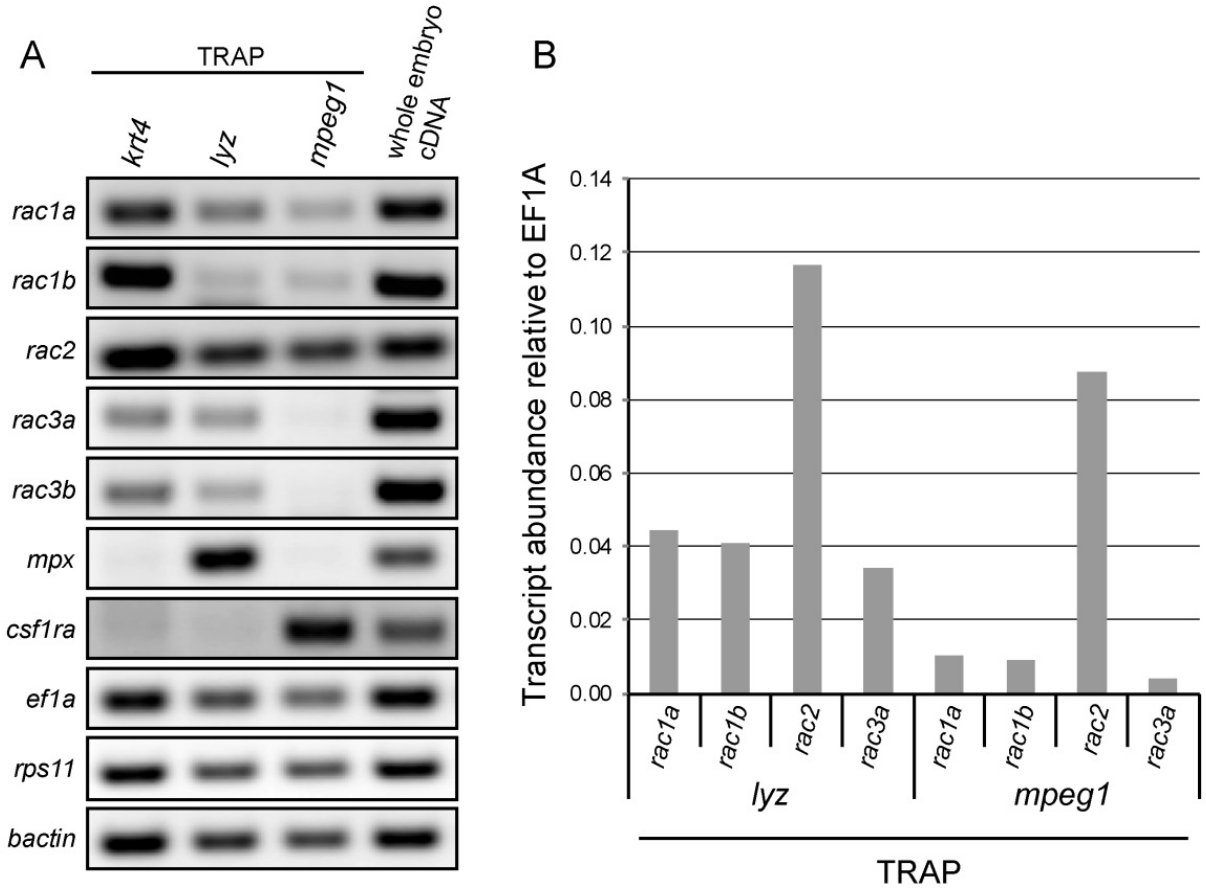
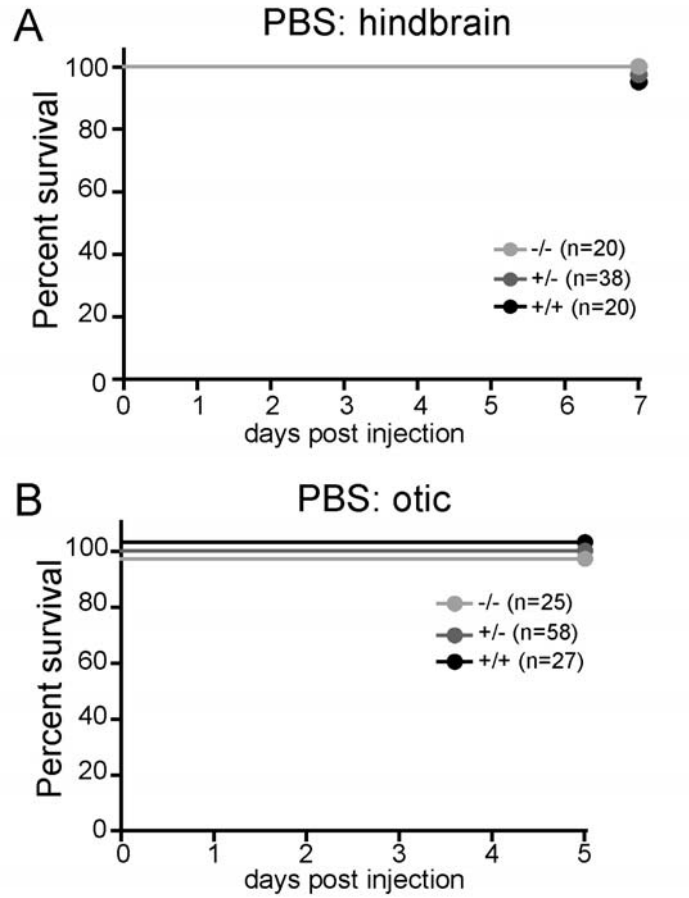


Supplemental Figure 1. Rho GTPase expression in *rac2*$^{-/-}$ larvae. RT-qPCR was performed on RNA from individual larvae from a *rac2*$^{+/-}$ in-cross. Data are from three pooled independent experiments; bars indicate calculated LS-adjusted means and SE. These experiments were done on the exon 5-B mutant line. Transcripts from *cdc42l2* and *rhoga* could not be amplified from samples.



Supplemental Figure 2. *rac* expression in zebrafish larval neutrophils and macrophages. TRAP was performed on pools of ~50 3 dpf larvae expressing EGFP-tagged L10a under the epithelial-specific *krt4* promoter, neutrophil-specific *lyz* promoter, or macrophage-specific *mpeg1* promoter. Total RNA was also isolated from whole embryos. Expression of genes was measured by RT-PCR (**A**) or RT-qPCR (**B**). This experiment was done three times, representative data are shown for both (**A**) and (**B**).



Supplemental Figure 3. *rac2*$^{-/-}$ larvae do not succumb to control PBS injections. A. Larvae 2 dpf from a *rac2*$^{+/-}$ in-cross were injected with PBS into the hindbrain. Survival was monitored for seven days. **B.** Larvae 3 dpf from a *rac2*$^{+/-}$ in-cross were injected with PBS into the otic vesicle and survival was monitored for five days. Data shown for each experiment are from three pooled independent replicates.

Supplemental Table I. Primer sequences.

Primer	Sequence (5' to 3')	Ref. (if previously published)
rac2_ex3_F	AACCAGTCAACCTGGGACTCT	
rac2_ex3_R	TGGTGTTTACCGTCTGCGG	
rac2_ex5_F	CACTGCCCTTCCACTCCAAT	
rac2_ex5_R	TCGGTGCCAGTTTCTTCTCC	
rac2_ex5_intronR	GACAAATCCAGCTCTGCCAC	
irf8_F	ACATAAGGCGTAGAGATTGGACG	(Shiau, Kaufman et al. 2015)
irf8_R	GAAACATAGTGCGGTCCTCATCC	
qrac1a_F	TCCGGCCTCATTTGAAAACG	
qrac1a_R	GTGTCCTTGTCATCTCGCAA	
qrac1b_F	CTCTCTCGTACCCTCAGACG	
qrac1b_R	TGGGAGTGGTTTGACAGTGA	
qrac2_F	AATACCTGGAGTGTTCGGCC	
qrac2_R	GCCCTTCTTCTTGACCTTGG	
qrac3a_F	CCCAGGAGAGTATATACCCACAG	
qrac3a_R	GGTATGAAAGTGGTCTAAGGCG	
qrac3b_F	CCCCGGCGAGTACATCCCTACAG	
qrac3b_R	GGTATGAGAGTGGACGGAGGCG	
qcdc42_F	TCTCAGTTGTTTCACCTTCTTCA	
qcdc42_R	GATCAATCTGCGTCCCCAC	
qcdc42l_F	AGTTATCCGCAGACAGACGT	
qcdc42l_R	AATGGAGTGCGTGGACAATG	
qrhoaa_F	TCCTGAGGTTTACGTTCCCA	
qrhoaa_R	TGGCCAGCTGTATCCCATAG	
qrhoab_F	ACAGGCTTCGTCCTCTTTCA	
qrhoab_R	AATGTTTGACCTCAGGCGTC	
qrhogb_F	CTACTAACTTCCACAGCCGC	
qrhogb_R	CCACCACCACACACTTGATG	
qrhogc_F	CGCTGCGATGATGGAAACTT	
qrhogc_R	CTGCACCATCACCAACAACA	
qmpx_F	AGGTGTTGCTGAGCCTTTTG	
qmpx_R	TGGTGAACACTCCATTGCTC	
qcsf1ra_F	ATGTCCAGACCTGACTTCGC	
qcsf1ra_R	TCGGATGTTTCTCCCAGCAT	
qef1a_F	TGCCTTCGTCCCAATTTCAG	(Oehlers, Flores et al. 2010)
qef1a_R	TACCCTCCTTGCGCTCAATC	
qrps11_F	TAAGAAATGCCCCTTCACTG	(de Oliveira, Reyes-Aldasoro et al. 2013)
qrps11_R	GTCTCTTCTCAAAACGGTTG	
qbactin2_F	GTGCCCATCTACGAGGGTTA	(de Oliveira, Reyes-Aldasoro et al. 2013)
qbactin2_R	TCTCAGCTGTGGTGGTGAAG	

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