

**Supplemental Table 1. Number of CD45+ cells in photoreceptor layer and choroid**

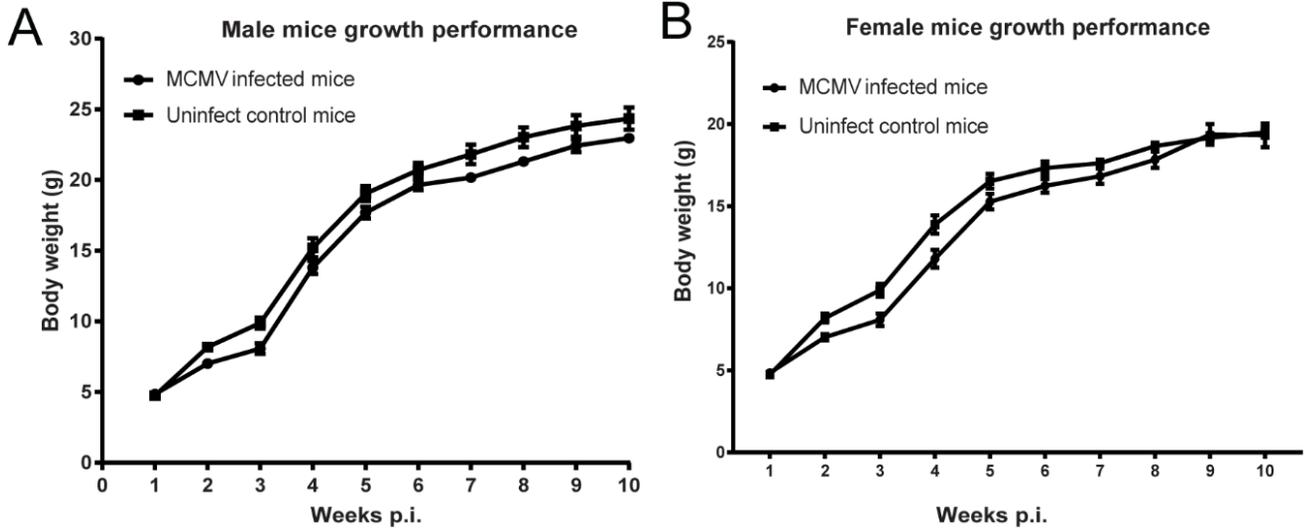
	Control (2 week old, n=5)	Acute infection (n=5)	Control (4 month old, n=5)	Latent infection (n=5)
Total cells in photoreceptor layer	4.75±1.50	22.80±11.03*	7.25±3.30	7.40±4.04
CD45+ cells in photoreceptor layer	0	6.40±3.29*	3.00±1.83	2.00±2.35
CD45+ cells in choroid	3.50±2.08	77.40±22.16**	1.60±1.52	5.20±3.96

Note: Data are shown as mean ± SEM and compared by the Mann-Whitney test. Acute infection vs Control (2 weeks): \*  $P < 0.05$ , \*\*  $P < 0.01$ .

Supplemental Table 2. PCR primers

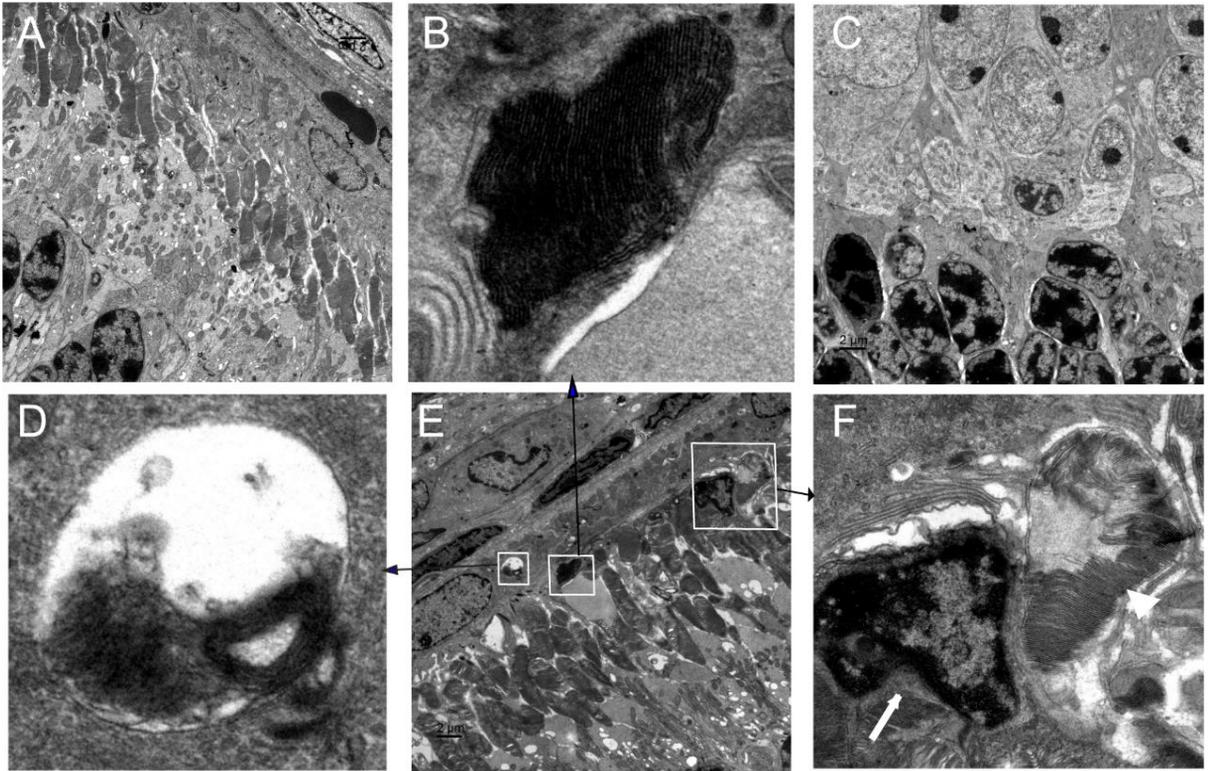
Gene symbol	Gene Description	Primers
		mCrb1 mF1: GTGAAGACAGCTACAGTTCTGATC
rd8	Retinal degeneration 8	mCrb1 mF2: GCCCCTGTTTGCATGGAGGAACTTGGAAAGACAGCTACAGTTCTTCTG mCrb1 mR: GCCCCATTTGCACACTGATGAC Reverse primer: ATCTGGTGCTCCTCAGATCAGCTAA
MCMV IE3	murine cytomegalovirus immediate-early gene 3	Forward primer: TGTGAGGCAGTAGTTATACC Reverse primer: CCTCGAGTCTGGAACCGAAA
MCMV gB	murine cytomegalovirus glycoprotein B gene	Forward primer: AGGGCTTGAGAGGACCTACA Reverse primer: GCCCGTCGGCAGTCTAGTC
TGF- $\beta$ 1	transforming growth factor beta 1	Forward primer: GCTGCGCTTGACAGATTA Reverse primer: TTGCTGTACTGTGTGCCAG
Ccl5	chemokine(C-C motif) ligand 5	Forward primer: GTGCTCCAATCTTGACAGTCG Reverse primer: AGAGCAAGCAATGACAGGGA
Angpt1	angiopoietin 1	Forward primer: GGGGGAGGTTGGACAGTAA Reverse primer: CATCAGCTCAATCCTCAGC
IL-6	interleukin 6	Forward primer: GTCCTTCCTACCCCAATTTCCA Reverse primer: TAACGCACTAGGTTTGCCGA
Vegf- $\alpha$	vascular endothelial growth factor a	Forward primer: CACAGCAGATGTGAATGCAG Reverse primer: TTTACACGTCTGCGGATCTT
ICAM-1	intercellular adhesion molecule-1	Forward primer: GTGATCCCTGGGCCTGGTG Reverse primer: GGAAACGAATACACGGTGATGG
M-csf	macrophage colony stimulating factor	Forward primer: TGATTGGGAATGGACACCTG Reverse primer: AAAGGCAATCTGGCATGAAGT
Angtp2	angiopoietin 2	Forward primer: GATCTTCCTCCAGCCCCTAC Reverse primer: TTTGTGCTGCTGTCTGGTTC
Pdgfb	platelet-derived growth factor beta chain	Forward primer: ACTCCATCCGCTCCTTTGAT Reverse primer: GTCTTGCACTCGGCGATTA
Ccl7	chemokine(C-C motif) ligand 5	Forward primer: AAGTGGGTCGAGGAGGCTAT Reverse primer: CCATTCCTTAGGCGTGACCA
Sdf1	stromal cell-derived factor 1	Forward primer: CAGAGCCAACGTCAAGCA Reverse primer: AGGTACTCTTGGATCCAC

# Supplemental Figure 1



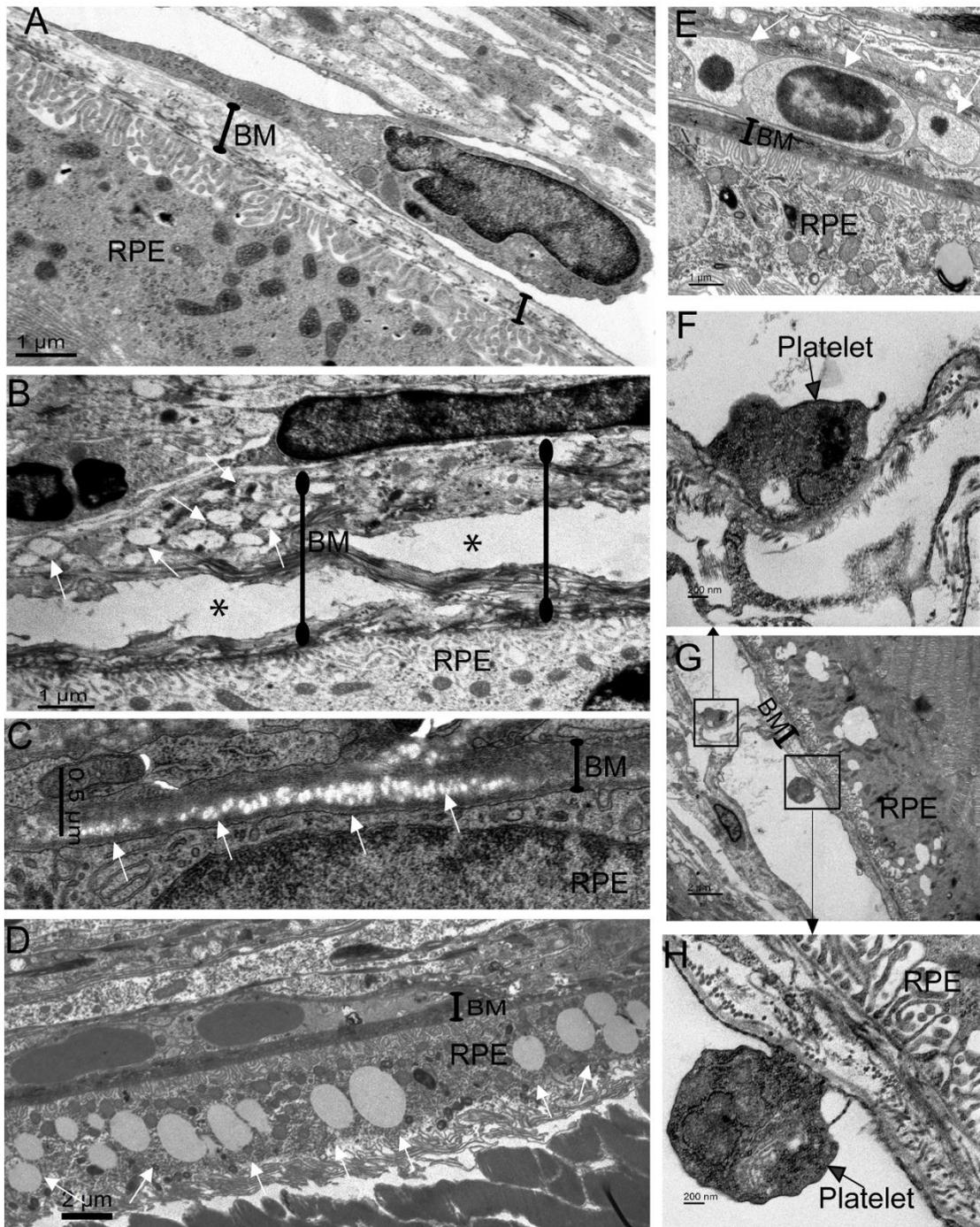
**Supplemental Figure 1.** (A, B) Postnatal changes in body weight in male (A) and female (B) neonatally-infected mice, compared to uninfected control male (A) and female (B) mice of the same age.

## Supplemental Figure 2



**Supplemental Figure 2. Representative electron micrographs of ocular ultrastructure in 14 days post neonatal i.p. infected or age matched uninfected control, BALB/c mice.** Compared to eyes from uninfected control mice (A), the outer BRB and Bruch's membrane showed no remarkable disorganization or disruption while the majority of RPE cells appeared indistinguishable from those of infected mice (E). However, large vesicles were noted in occasional RPE cells (D) while a few infiltrating cells (F, arrow) and increased phagocytosis of outer segments (B, I as indicated by arrowhead) were observed in the photoreceptor layer. No remarkable pathological changes were found in the inner retina of MCMV-infected mice (C).

### Supplemental Figure 3



Supplemental Figure 3. Representative electron micrographs of ocular ultrastructure in 4 months post neonatal i.p. infected (B-H) or age matched uninfected control, BALB/c mice (A). (A) Only occasional lipid vesicles were noted in RPE cells of control mice. (B) Many lipid vesicles (arrows) were noted in the BM which appeared to be thickened. (C) Many lipid vesicles (arrows) were noted in the BM. (D) Many large lipid vesicles were observed inside RPE cells and the BM was intensely stained in some areas. (E) Cell death was noted in some areas of the choroid and the BM was intensely stained. (F, G, H) Platelets were attached to vascular endothelia in the choroid and some appeared activated.