

**Supplementary information for:**

Manuscript title: **Simultaneously targeting inflammatory response and parasite sequestration in brain to treat Experimental Cerebral Malaria**

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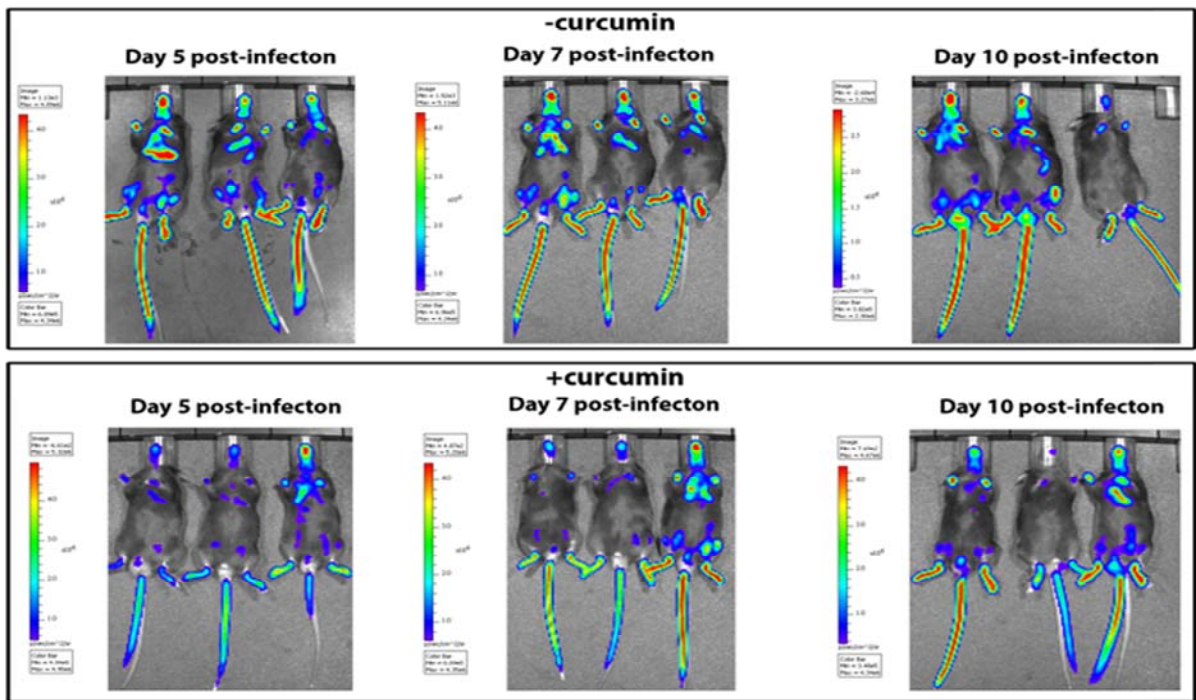
**Supplementary Figure 1.** Representative whole body bioluminescent images of untreated and curcumin-treated mice infected with *P. berghei*-ANKA transgenic parasites expressing luciferase.

**Supplementary Figure 2.** FACS analysis of CXCR3<sup>+</sup>/CD3<sup>+</sup>/CD8<sup>+</sup> cells in brain leucocytes of uninfected and *P. berghei*-infected mice.

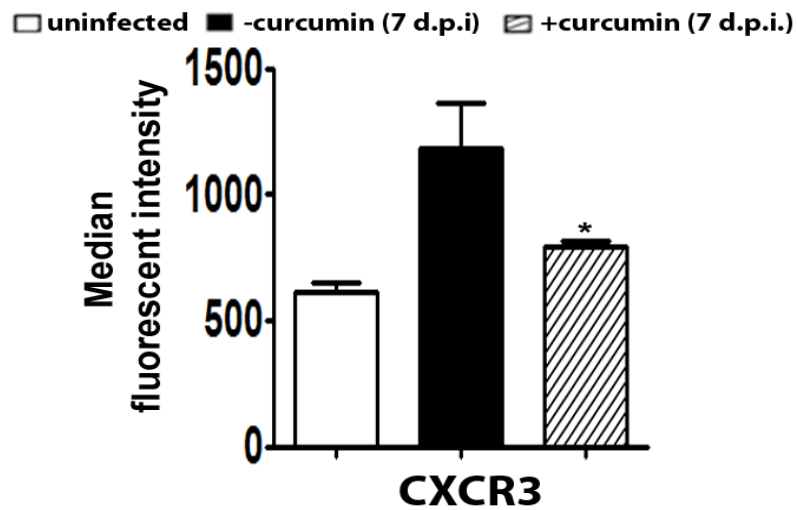
**Supplementary Table 1.** Primers used in qPCR reactions

**Supplementary Table 2.** Analysis of curcumin in plasma and brain of mice.

**Supplementary Figure 3.** Unprocessed original scans of blots in Figure 5b



**Supplementary Figure 1.** Representative whole body bioluminescent images of untreated (-curcumin) and curcumin-treated mice infected with *P. berghei*-ANKA transgenic parasites expressing luciferase.



**Supplementary Figure 2.** FACS analysis of CXCR3<sup>+</sup>/CD3<sup>+</sup>/CD8<sup>+</sup> cells in brain leucocytes of uninfected and *P. berghei*-infected mice.

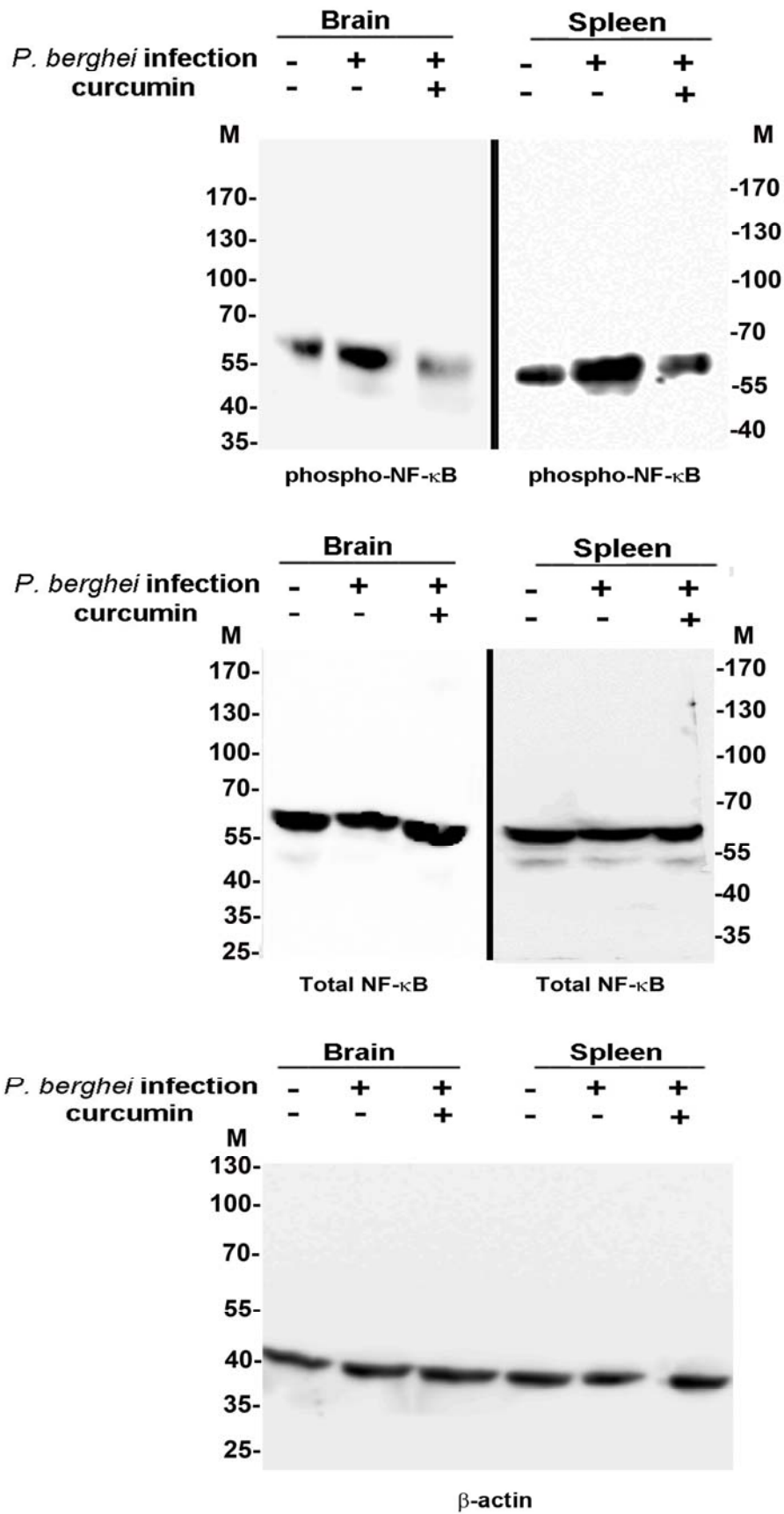
**Supplementary Table 1.** Primers used in qPCR reactions

Gene	Gene sequence
<i>CXCR3</i>	Forward 5' AATGCCACCCATTGCCAGTAC 3' Reverse 5' AGCAGTAGGCCATGACCAGAAG 3'
<i>CXCL9</i>	Forward 5' GCCATGAAGTCCGCTGTTCT 3' Reverse 5' GGGTTCCTCGAACTCCACACT
<i>CXCL10</i>	Forward 5' GACGGTCCGCTGCAACTG 3' Reverse 5' GCTTCCTATGGCCCTCATT 3'
<i>TNF<math>\alpha</math></i>	Forward 5' AAGCCTGTAGCCACGTCGTA3' Reverse 5' GGCACCACTAGTTGGTTGTCTTTG 3'
<i>IFN<math>\gamma</math></i>	Forward 5' TCAAGTGGCATAGATGTGGAAGAA Reverse 5' TGGCTCTGCAGGATTTTCATG 3'
<i>ICAM1</i>	Forward 5' GCCTCCGACTTTTCGATCTT 3' Reverse 5' GTCAGGGGTGTCGAGCTTTG 3'
<i>CD8<math>\beta</math></i>	Forward 5' GCTGGTAGTCTGCATCCTGCTTC 3' Reverse 5' TTGCTAGCAGGCTATCAGTCTTGTG 3'
<i>18S rRNA P. berghei ANKA</i>	Forward 5' AAGCATTAAATAAAGCGAATACATCCTTAC 3' Reverse 5' GGAGATTGGTTTTGACGTTTATGTG 3'
<i>CCR7</i>	Forward 5' TCATTGCCGTGGTGGTAGTCTTCA 3' Reverse 5' ATGTTGAGCTGCTTGCTGGTTTCG 3'
<i>CCL19</i>	Forward 5' ATGTGAATCACTCTGGCCCAGGAA 3' Reverse 5' AAGCGGCTTTATTGGAAGCTCTGC 3'
<i>CCL20</i>	Forward 5' CGACTGTTGCCTCTCGTACA 3' Reverse 5' GAGGAGGTTACAGCCCTTT 3'
<i>CCL21</i>	Forward 5' TGAGCTATGTGCAAACCCTGAGGA3' Reverse 5' TGAGGGCTGTGTCTGTTTCAGTTCT3'
<i>Granzyme B</i>	Forward 5' CCTCCTGCTACTGCTGAC 3' Reverse 5' GTCAGCACAAAGTCCTCTC 3'

**Supplementary Table 2.** Analysis of curcumin in plasma and brain of mice.

Sample	Curcumin (ng/g)	DMC (ng/g)	BDMC (ng/g)	Curcumin glucuronide (ng/g)
Uninfected 2h plasma	2.84	ND	ND	541.32
Uninfected 4h plasma	11.86	4.86	ND	420.16
Infected 2h plasma	10.96	1.78	0.3	525.7
Infected 4h plasma	2.88	0.28	0.28	51.94
Uninfected 2h brain	1.97	0.25	0.082	ND
Uninfected 4h brain	1.60	0.084	ND	ND
Infected 2h brain	4.77	0.59	0.17	ND
Infected 4h brain	ND	ND	ND	ND

ND, Not detected; DMC, demethoxy curcumin; BDMC, bisdemethoxy curcumin



Supplementary Figure 3. Unprocessed original scans of blots in Figure 5b.