

SUPPLEMENTARY MATERIALS

C-terminal binding proteins 1 and 2 in traumatic brain injury-induced inflammation and their inhibition as an approach for anti-inflammatory treatment

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Figure S1

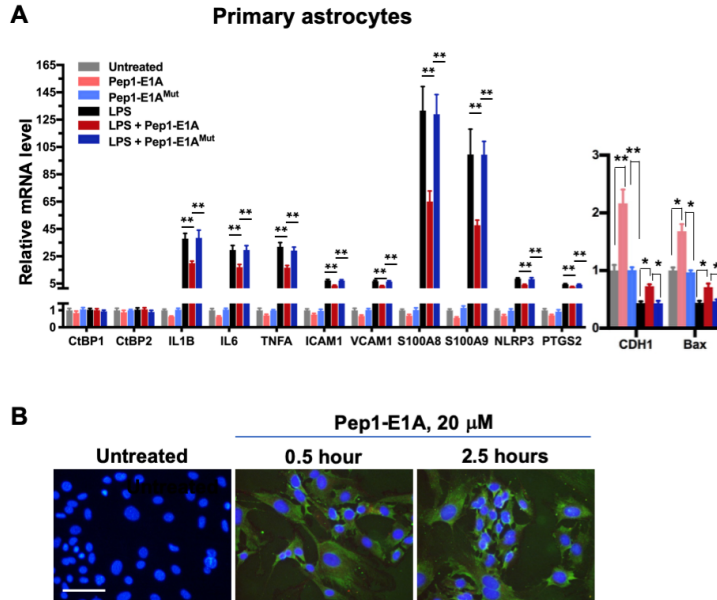


Figure S1. Pep1-E1A suppresses LPS-induced inflammatory gene expression in mouse primary astrocytes.

(A) Effects of pretreatment with 20 μ M Pep1-E1A or Pep1-E1A^{Mut} on the basal and LPS-induced mRNA expression of CtBP target genes in mouse primary astrocytes. $n = 3$; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

(B) Representative immunostaining images of Pep1-E1A internalization into cultured astrocytes after 0.5 and 2.5 h incubation. Scale bar, 50 μ m.

Figure S2

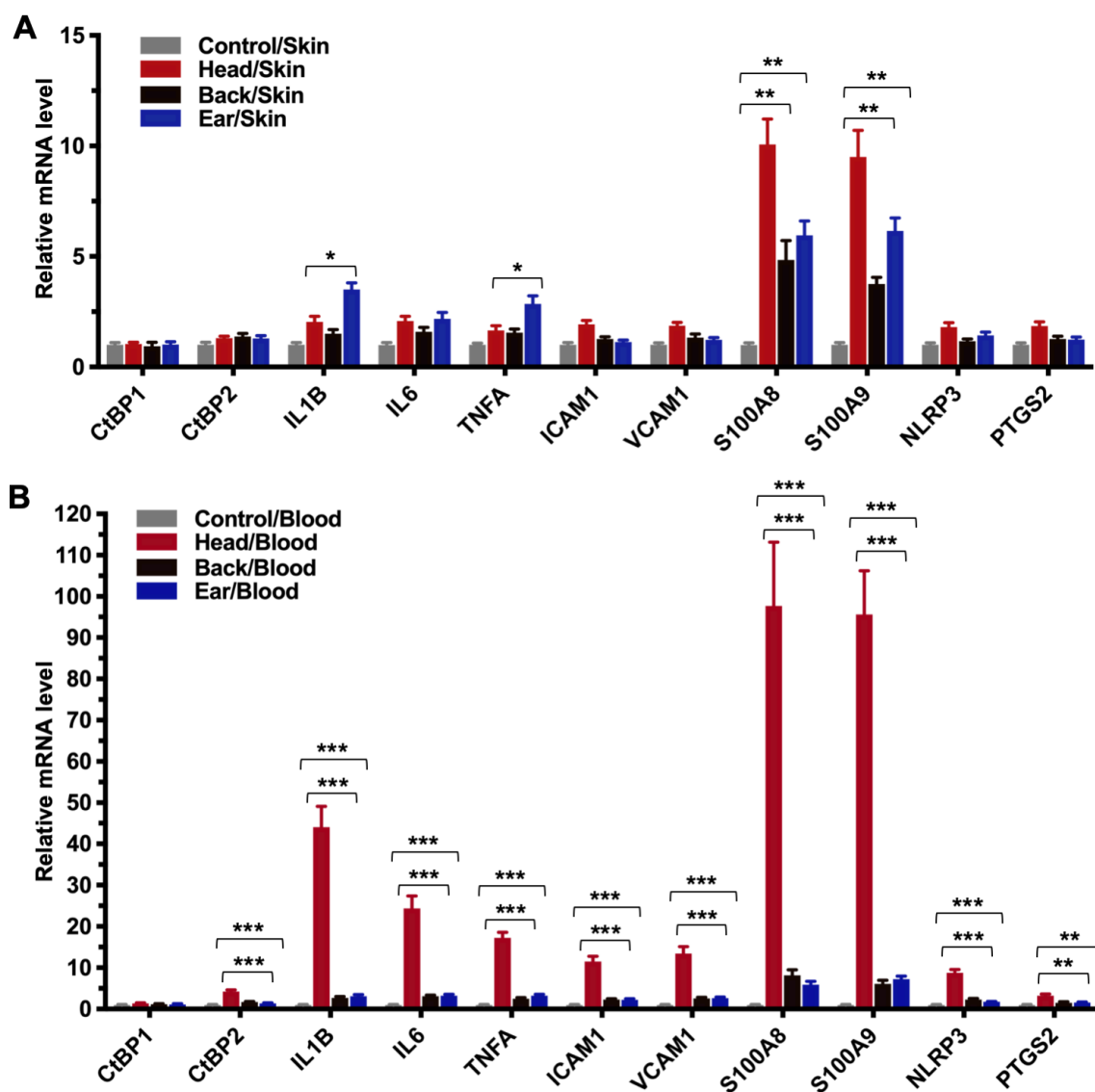


Figure S2. CHIMERA-delivered mild TBI causes systemic inflammatory response.

Mice received sham procedure (control) or a single impact of 0.7 J energy to the head, the back, or the ear. Skin tissues containing the site of the impact (A) and peripheral blood leukocytes (B) and were collected 24 h postinjury for total RNA extraction and RT-qPCR analysis. $n = 4$; $*p < 0.05$, $**p < 0.01$, $***p < 0.001$.

Table S1. Sequences of primers used in this study.

| ChIP-qPCR | Forward (5' to 3') | Reverse (5' to 3') |
|------------------|---------------------------|-----------------------------|
| mIL1B | ACATGAGACTGGCTATGGTATT | TTATCCCTTTTCCAGGTCTCCC |
| mIL6 | AGGGCTAGCCTCAAGGATGACT | GGAGTCAACTCTCTAATTTTGA |
| mTNFA | CAGCCCTCCCAAAGCCCATGCA | GTGCTTCTGAAAGCTGGGTGCA |
| mS100A8 | GCCTAGACATGGACTTATTGCC | AGCATTTCTGAGTCTGAGGAAG |
| | | |
| RT-qPCR | | |
| mCtBP1 | TAGGCGGGGCAAGAGGAAGC | CGAGGAACGCAAAGGACACAGG |
| mCtBP2 | GGCACACCCCTCCCAAGCTC | GGCACACCCCTCCCAAGCTC |
| mIL1B | GCCCATCAGAGGCAAGGAGGA | CAGGTCGCTCAGGGTCACAAGA |
| mIL6 | TGGCTAAGGACCAAGACCATCCA | CATAACGCACTAGGTTTGCCGAGTAGA |
| mTNFA | CCCACACCGTCAGCCGATTT | CCTTGGGGCAGGGGCTCTT |
| mICAM1 | TGGTACATACGTGTGCCATGCCT | ATCCTGATCTTTCTCTGGCGGT |
| mVCAM1 | TCCGCCAGGCACAGCTGCAGGA | ATTACCAAGGAAGATGCGCAG |
| mS100A8 | TCGAGGAGTTCCTTGCGATGG | ACATATCCAGGGACCCAGCCCTA |
| mS100A9 | TGGAGGACCTGGACACAAACCAG | TTCCACAGCCTTTGCCATGA |
| mNLRP3 | CCCCCTCCTCCTCCGCTTCT | CTAGCCCACGGGCAGCTCCT |
| mPTGS2 | GGACTGCAGAAGGCCCATGT | GGAACACAGCTACGAAAACCAATCA |
| mCDH1 | CCCCTCCAATGCCTGCTCTTG | TCTGACTGCCTCTGCCTCCTGA |
| mBax | AGTCCTCACCGCCTCGCTCA | GCCTTTCCCTTCCCCCATT |