

Supplementary Table 1. Effect of TBI on Brain Inflammatory Genes:
Genes differentially expressed (>1.5 fold change, p<0.05)

| Affymetrix ID | Gene Symbol | Genes | <u>Vehicle+TBI</u> <u>Sham</u> |
|----------------------|-------------|---|-----------------------------------|
| 24 h post TBI | | | |
| 10770082 | Ifi204 | interferon activated gene 204 | 2.46 |
| 10787491 | Ifi30 | interferon gamma inducible protein 30 | 4.10 |
| 10701924 | Ifngr1 | interferon gamma receptor 1 | 1.67 |
| 10712171 | Ifitm1 | interferon induced transmembrane protein 1 | 3.65 |
| 10726679 | Ifitm2 | interferon induced transmembrane protein 2 | 1.99 |
| 10726682 | Ifitm3 | interferon induced transmembrane protein 3 | 3.34 |
| 10845708 | Ifih1 | interferon induced with helicase C domain 1 | 1.71 |
| 10733553 | Irf1 | interferon regulatory factor 1 | 2.19 |
| 10854190 | Irf5 | interferon regulatory factor 5 | 1.54 |
| 10726758 | Irf7 | interferon regulatory factor 7 | 1.79 |
| 10808431 | Irf8 | interferon regulatory factor 8 | 2.44 |
| 10780433 | Irf9 | interferon regulatory factor 9 | 2.34 |
| 10708015 | Isg20 | interferon stimulated exonuclease gene 20 | 1.50 |
| 10729791 | Ifit1 | interferon-induced protein with tetratricopeptide repeats 1 | 5.54 |
| 10714903 | Ifit3 | interferon-induced protein with tetratricopeptide repeats 3 | 6.04 |
| 10940689 | Ifrd1 | interferon-related developmental regulator 1 | 1.91 |
| 10849841 | Il1b | interleukin 1 beta | 6.82 |
| 10935076 | Il1rapl2 | interleukin 1 receptor accessory protein-like 2 | 0.61 |
| 10834109 | Il1rn | interleukin 1 receptor antagonist | 17.23 |
| 10922826 | Il1r1 | interleukin 1 receptor, type I | 1.92 |
| 10922816 | Il1r2 | interleukin 1 receptor, type II | 7.10 |
| 10902662 | Irak3 | interleukin-1 receptor-associated kinase 3 | 2.16 |
| 10898862 | Irak4 | interleukin-1 receptor-associated kinase 4 | 1.76 |
| 10938654 | Il2rg | interleukin 2 receptor, gamma | 3.96 |
| 10710782 | Il4ra | interleukin 4 receptor, alpha | 2.61 |
| 10859799 | Il6 | interleukin 6 | 2.53 |
| 10824530 | Il6r | interleukin 6 receptor | 2.09 |
| 10821851 | Il7r | interleukin 7 receptor | 1.74 |
| 10750193 | Il10rb | interleukin 10 receptor, beta | 2.50 |
| 10703953 | Il11 | interleukin 11 | 3.12 |
| 10815873 | Il12a | interleukin 12A | 0.65 |
| 10936365 | Il13ra1 | interleukin 13 receptor, alpha 1 | 2.84 |
| 10858315 | Il17ra | interleukin 17 receptor A | 2.09 |
| 10789857 | Il17rb | interleukin 17 receptor B | 2.10 |
| 10909874 | Il18 | interleukin 18 | 1.93 |
| 10922882 | Il18rap | interleukin 18 receptor accessory protein | 2.38 |
| 10919537 | Il20rb | interleukin 20 receptor beta | 2.22 |
| 10701934 | Il22ra2 | interleukin 22 receptor, alpha 2 | 1.58 |
| 10828021 | Tnf | tumor necrosis factor (TNF superfamily, member 2) | 1.55 |
| 10858967 | Tnfrsf1a | tumor necrosis factor receptor superfamily, member 1a | 3.05 |
| 10881424 | Tnfrsf1b | tumor necrosis factor receptor superfamily, member 1b | 3.84 |
| 10814528 | Tnfsf10 | tumor necrosis factor (ligand) superfamily, member 10 | 0.40 |
| 10781321 | Tnfrsf10b | tumor necrosis factor receptor superfamily, member 10b | 1.54 |
| 10793038 | Tnfsf13b | tumor necrosis factor (ligand) superfamily, member 13b | 1.59 |
| 10740869 | Tnfrsf12a | tumor necrosis factor receptor superfamily, member 12a | 3.76 |
| 10727109 | Tnfrsf26 | tumor necrosis factor receptor superfamily, member 26 | 2.03 |
| 72 h post TBI | | | |
| 10787491 | Ifi30 | interferon gamma inducible protein 30 | 8.67 |
| 10701924 | Ifngr1 | interferon gamma receptor 1 | 2.32 |
| 10712171 | Ifitm1 | interferon induced transmembrane protein 1 | 8.98 |

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|----------|-----------|---|------|
| 10726679 | Ifitm2 | interferon induced transmembrane protein 2 | 3.96 |
| 10726682 | Ifitm3 | interferon induced transmembrane protein 3 | 3.07 |
| 10845708 | Ifh1 | interferon induced with helicase C domain 1 | 1.94 |
| 10733553 | Irf1 | interferon regulatory factor 1 | 2.11 |
| 10854190 | Irf5 | interferon regulatory factor 5 | 2.49 |
| 10726758 | Irf7 | interferon regulatory factor 7 | 1.59 |
| 10808431 | Irf8 | interferon regulatory factor 8 | 5.12 |
| 10780433 | Irf9 | interferon regulatory factor 9 | 2.04 |
| 10738415 | Ifi35 | interferon-induced protein 35 | 1.58 |
| 10827349 | Ifi44 | interferon-induced protein 44 | 1.62 |
| 10729791 | Ifit1 | interferon-induced protein with tetratricopeptide repeats 1 | 1.54 |
| 10714907 | Ifit1 | interferon-induced protein with tetratricopeptide repeats 1 | 1.66 |
| 10849833 | Il1a | interleukin 1 alpha | 2.15 |
| 10849841 | Il1b | interleukin 1 beta | 1.84 |
| 10834109 | Il1rn | interleukin 1 receptor antagonist | 9.09 |
| 10922826 | Il1r1 | interleukin 1 receptor, type I | 1.88 |
| 10922816 | Il1r2 | interleukin 1 receptor, type II | 1.61 |
| 10938654 | Il2rg | interleukin 2 receptor, gamma | 4.34 |
| 10710782 | Il4ra | interleukin 4 receptor, alpha | 3.07 |
| 10824530 | Il6r | interleukin 6 receptor | 2.05 |
| 10821851 | Il7r | interleukin 7 receptor | 2.84 |
| 10916973 | Il10ra | interleukin 10 receptor, alpha | 2.10 |
| 10750193 | Il10rb | interleukin 10 receptor, beta | 3.24 |
| 10754983 | Il13ra1 | interleukin 13 receptor, alpha 1 | 3.08 |
| 10858315 | Il17ra | interleukin 17 receptor A | 2.07 |
| 10789857 | Il17rb | interleukin 17 receptor B | 2.12 |
| 10909874 | Il18 | interleukin 18 | 3.37 |
| 10724131 | Il18bp | interleukin 18 binding protein | 1.66 |
| 10922871 | Il18r1 | interleukin 18 receptor 1 | 1.62 |
| 10919537 | Il20rb | interleukin 20 receptor beta | 5.73 |
| 10710795 | Il21r | interleukin 21 receptor | 2.00 |
| 10714745 | Il33 | interleukin 33 | 1.66 |
| 10858967 | Tnfrsf1a | tumor necrosis factor receptor superfamily, member 1a | 3.25 |
| 10881424 | Tnfrsf1b | tumor necrosis factor receptor superfamily, member 1b | 4.47 |
| 10793038 | Tnfsf13b | tumor necrosis factor (ligand) superfamily, member 13b | 2.67 |
| 10740869 | Tnfrsf12a | tumor necrosis factor receptor superfamily, member 12a | 2.27 |
| 10727109 | Tnfrsf26 | tumor necrosis factor receptor superfamily, member 26 | 1.67 |

7 days

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|----------|--------|---|------|
| 10701924 | Ifngr1 | interferon gamma receptor 1 | 2.12 |
| 10712171 | Ifitm1 | interferon induced transmembrane protein 1 | 4.21 |
| 10726679 | Ifitm2 | interferon induced transmembrane protein 2 | 2.30 |
| 10726682 | Ifitm3 | interferon induced transmembrane protein 3 | 3.48 |
| 10845708 | Ifh1 | interferon induced with helicase C domain 1 | 2.78 |
| 10733553 | Irf1 | interferon regulatory factor 1 | 2.26 |
| 10854190 | Irf5 | interferon regulatory factor 5 | 2.52 |
| 10726758 | Irf7 | interferon regulatory factor 7 | 4.83 |
| 10808431 | Irf8 | interferon regulatory factor 8 | 4.90 |
| 10780433 | Irf9 | interferon regulatory factor 9 | 2.49 |
| 10708015 | Isg20 | interferon stimulated exonuclease gene 20 | 1.85 |
| 10886573 | Ifi27 | interferon, alpha-inducible protein 27 | 2.34 |
| 10738415 | Ifi35 | interferon-induced protein 35 | 1.53 |
| 10827349 | Ifi44 | interferon-induced protein 44 | 2.65 |
| 10834014 | Ifi44l | interferon-induced protein 44-like | 3.53 |
| 10714900 | Ifit2 | interferon-induced protein with tetratricopeptide repeats 2 | 2.57 |
| 10714903 | Ifit3 | interferon-induced protein with tetratricopeptide repeats 3 | 3.98 |
| 10849833 | Il1a | interleukin 1 alpha | 2.08 |

| | | | |
|----------|-----------|--|------|
| 10834109 | Il1rn | interleukin 1 receptor antagonist | 2.66 |
| 10922826 | Il1r1 | interleukin 1 receptor, type I | 1.54 |
| 10922857 | Il1rl1 | interleukin 1 receptor-like 1 | 4.29 |
| 10916973 | Il10ra | interleukin 10 receptor, alpha | 2.01 |
| 10750193 | Il10rb | interleukin 10 receptor, beta | 2.65 |
| 10754983 | Il13ra1 | interleukin 13 receptor, alpha 1 | 2.35 |
| 10858315 | Il17ra | interleukin 17 receptor A | 1.74 |
| 10789857 | Il17rb | interleukin 17 receptor B | 1.68 |
| 10909874 | Il18 | interleukin 18 | 2.47 |
| 10922871 | Il18r1 | interleukin 18 receptor 1 | 1.51 |
| 10938654 | Il2rg | interleukin 2 receptor, gamma | 2.23 |
| 10710795 | Il21r | interleukin 21 receptor | 1.52 |
| 10710782 | Il4ra | interleukin 4 receptor, alpha | 1.56 |
| 10824530 | Il6r | interleukin 6 receptor | 1.98 |
| 10821851 | Il7r | interleukin 7 receptor | 1.95 |
| 10793038 | Tnfsf13b | tumor necrosis factor (ligand) superfamily, member 13b | 2.31 |
| 10765092 | Tnfsf4 | tumor necrosis factor (ligand) superfamily, member 4 | 1.75 |
| 10858967 | Tnfrsf1a | tumor necrosis factor receptor superfamily, member 1a | 2.52 |
| 10881424 | Tnfrsf1b | tumor necrosis factor receptor superfamily, member 1b | 3.05 |
| 10824951 | Tnfaip8l2 | tumor necrosis factor, alpha-induced protein 8-like 2 | 1.64 |
