

Supplementary table 2: Sequencing reads obtained by RNA-seq for control and *Cstb*^{-/-} microglia samples.

| sample | repeat | qualified reads | total reads | redundancy | mapped reads | mapped rate | spike-in reads | mapped / spike-in |
|------------------------------|--------|-----------------|-------------|------------|--------------|-------------|----------------|-------------------|
| control 1 | 1 | 2984694 | 679195 | 4.4 | 606601 | 0.89 | 564 | 1076 |
| control 1 | 2 | 2317592 | 517534 | 4.5 | 457869 | 0.88 | 552 | 829 |
| control 1 | 3 | 2527847 | 559275 | 4.5 | 491439 | 0.88 | 625 | 786 |
| control 1 | 4 | 1714206 | 396263 | 4.3 | 353819 | 0.89 | 432 | 819 |
| control 2 | 1 | 2500907 | 553827 | 4.5 | 492702 | 0.89 | 1299 | 379 |
| control 2 | 2 | 2252758 | 506434 | 4.4 | 443755 | 0.88 | 1279 | 347 |
| control 2 | 3 | 1899071 | 452731 | 4.2 | 396990 | 0.88 | 1034 | 384 |
| control 2 | 4 | 1779932 | 397579 | 4.5 | 353190 | 0.89 | 834 | 423 |
| control 3 | 1 | 2553812 | 566561 | 4.5 | 498987 | 0.88 | 1279 | 390 |
| control 3 | 2 | 3107175 | 643850 | 4.8 | 563026 | 0.87 | 877 | 642 |
| control 3 | 3 | 2781654 | 591424 | 4.7 | 518123 | 0.88 | 717 | 723 |
| control 3 | 4 | 2205093 | 459893 | 4.8 | 406846 | 0.88 | 660 | 616 |
| control 4 | 1 | 2431170 | 597674 | 4.1 | 526259 | 0.88 | 1726 | 305 |
| control 4 | 2 | 2574585 | 565357 | 4.6 | 501508 | 0.89 | 1070 | 469 |
| control 4 | 3 | 2656682 | 581931 | 4.6 | 516519 | 0.89 | 919 | 562 |
| control 4 | 4 | 2467864 | 542767 | 4.5 | 484953 | 0.89 | 715 | 678 |
| <i>Cstb</i> ^{-/-} 1 | 1 | 2866067 | 605222 | 4.7 | 537135 | 0.89 | 1175 | 457 |
| <i>Cstb</i> ^{-/-} 1 | 2 | 2425846 | 523996 | 4.6 | 462365 | 0.88 | 1041 | 444 |
| <i>Cstb</i> ^{-/-} 1 | 3 | 1726517 | 373496 | 4.6 | 329673 | 0.88 | 647 | 510 |
| <i>Cstb</i> ^{-/-} 1 | 4 | 3084003 | 649858 | 4.7 | 575629 | 0.89 | 727 | 792 |
| <i>Cstb</i> ^{-/-} 2 | 1 | 3944327 | 794888 | 5.0 | 699396 | 0.88 | 1331 | 525 |
| <i>Cstb</i> ^{-/-} 2 | 2 | 1887789 | 432366 | 4.4 | 384937 | 0.89 | 895 | 430 |
| <i>Cstb</i> ^{-/-} 2 | 3 | 2257267 | 528927 | 4.3 | 468471 | 0.89 | 752 | 623 |
| <i>Cstb</i> ^{-/-} 2 | 4 | 1995105 | 469485 | 4.2 | 416751 | 0.89 | 673 | 619 |
| <i>Cstb</i> ^{-/-} 3 | 1 | 2352112 | 531547 | 4.4 | 472982 | 0.89 | 1099 | 430 |
| <i>Cstb</i> ^{-/-} 3 | 2 | 1959027 | 441155 | 4.4 | 392178 | 0.89 | 910 | 431 |
| <i>Cstb</i> ^{-/-} 3 | 3 | 2728797 | 588194 | 4.6 | 521859 | 0.89 | 943 | 553 |
| <i>Cstb</i> ^{-/-} 3 | 4 | 2810710 | 595598 | 4.7 | 527292 | 0.89 | 702 | 751 |
| <i>Cstb</i> ^{-/-} 4 | 1 | 1979259 | 454647 | 4.4 | 405341 | 0.89 | 493 | 822 |
| <i>Cstb</i> ^{-/-} 4 | 2 | 1763589 | 418578 | 4.2 | 372098 | 0.89 | 694 | 536 |
| <i>Cstb</i> ^{-/-} 4 | 3 | 2169921 | 504735 | 4.3 | 448723 | 0.89 | 574 | 782 |
| <i>Cstb</i> ^{-/-} 4 | 4 | 2258327 | 507985 | 4.4 | 449300 | 0.88 | 522 | 861 |

| sample | repeat | spike-in 5-end reads | spike-in 5-end rate | coding reads | coding 5-end reads | coding 5-end rate | force approval |
|------------------------------|--------|----------------------|---------------------|--------------|--------------------|-------------------|----------------|
| control 1 | 1 | 538 | 0.95 | 539076 | 431398 | 0.80 | FALSE |
| control 1 | 2 | 523 | 0.95 | 401998 | 321253 | 0.80 | FALSE |
| control 1 | 3 | 602 | 0.96 | 429162 | 346765 | 0.81 | FALSE |
| control 1 | 4 | 406 | 0.94 | 314010 | 253953 | 0.81 | FALSE |
| control 2 | 1 | 1219 | 0.94 | 436281 | 351597 | 0.81 | FALSE |
| control 2 | 2 | 1213 | 0.95 | 382418 | 306825 | 0.80 | FALSE |
| control 2 | 3 | 982 | 0.95 | 339670 | 273879 | 0.81 | FALSE |
| control 2 | 4 | 797 | 0.96 | 310564 | 244472 | 0.79 | FALSE |
| control 3 | 1 | 1206 | 0.94 | 432540 | 347957 | 0.80 | FALSE |
| control 3 | 2 | 828 | 0.94 | 486974 | 391656 | 0.80 | FALSE |
| control 3 | 3 | 675 | 0.94 | 444698 | 356105 | 0.80 | FALSE |
| control 3 | 4 | 620 | 0.94 | 357503 | 290188 | 0.81 | FALSE |
| control 4 | 1 | 1653 | 0.96 | 452748 | 361678 | 0.80 | FALSE |
| control 4 | 2 | 1030 | 0.96 | 440975 | 357697 | 0.81 | FALSE |
| control 4 | 3 | 872 | 0.95 | 452378 | 364774 | 0.81 | FALSE |
| control 4 | 4 | 670 | 0.94 | 429548 | 347108 | 0.81 | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 1 | 1129 | 0.96 | 478488 | 394049 | 0.82 | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 2 | 986 | 0.95 | 408077 | 336150 | 0.82 | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 3 | 616 | 0.95 | 291861 | 240904 | 0.83 | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 4 | 684 | 0.94 | 513870 | 423753 | 0.82 | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 1 | 1248 | 0.94 | 599752 | 475204 | 0.79 | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 2 | 851 | 0.95 | 334837 | 267840 | 0.80 | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 3 | 721 | 0.96 | 407345 | 328726 | 0.81 | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 4 | 636 | 0.95 | 361631 | 290309 | 0.80 | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 1 | 1036 | 0.94 | 424043 | 348208 | 0.82 | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 2 | 850 | 0.93 | 351672 | 290626 | 0.83 | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 3 | 890 | 0.94 | 468891 | 389908 | 0.83 | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 4 | 658 | 0.94 | 471729 | 387096 | 0.82 | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 1 | 465 | 0.94 | 356305 | 285920 | 0.80 | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 2 | 648 | 0.93 | 326924 | 265279 | 0.81 | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 3 | 544 | 0.95 | 395855 | 320891 | 0.81 | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 4 | 483 | 0.93 | 392434 | 311760 | 0.79 | FALSE |

| sample | repeat | spike-in reads outlier | mapped / spike-in outlier | spike-in 5-end rate outlier | coding 5-end rate outlier |
|------------------------------|--------|------------------------|---------------------------|-----------------------------|---------------------------|
| control 1 | 1 | FALSE | FALSE | FALSE | FALSE |
| control 1 | 2 | FALSE | FALSE | FALSE | FALSE |
| control 1 | 3 | FALSE | FALSE | FALSE | FALSE |
| control 1 | 4 | FALSE | FALSE | FALSE | FALSE |
| control 2 | 1 | FALSE | FALSE | FALSE | FALSE |
| control 2 | 2 | FALSE | FALSE | FALSE | FALSE |
| control 2 | 3 | FALSE | FALSE | FALSE | FALSE |
| control 2 | 4 | FALSE | FALSE | FALSE | FALSE |
| control 3 | 1 | FALSE | FALSE | FALSE | FALSE |
| control 3 | 2 | FALSE | FALSE | FALSE | FALSE |
| control 3 | 3 | FALSE | FALSE | FALSE | FALSE |
| control 3 | 4 | FALSE | FALSE | FALSE | FALSE |
| control 4 | 1 | FALSE | FALSE | FALSE | FALSE |
| control 4 | 2 | FALSE | FALSE | FALSE | FALSE |
| control 4 | 3 | FALSE | FALSE | FALSE | FALSE |
| control 4 | 4 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 1 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 2 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 3 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 1 | 4 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 1 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 2 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 3 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 2 | 4 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 1 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 2 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 3 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 3 | 4 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 1 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 2 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 3 | FALSE | FALSE | FALSE | FALSE |
| <i>Cstb</i> ^{-/-} 4 | 4 | FALSE | FALSE | FALSE | FALSE |