**Supplementary Table S1.** Number of eQTLs and eGenes for translation machinery**\***

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Number of eQTLs | | | | | |  | Number of GWAS signal – eQTL pairs§ | | | | | |
| Tissue | All | Translation machinery¶ | | | | |  | All | Translation machinery¶ | | | | |
| POL I | POL II | POL III | RP | Total | POL I | POL II | POL III | RP | Total |
| Adipose | 2031092  (12482) | 4126  (6) | 203  (5) | 1277  (7) | 8554  (49) | 14160  (67) |  | 207516  (7226) | 91  (4) | 6  (1) | 25  (3) | 685  (32) | 807  (40) |
| Brain | 1062869  (9082) | 585  (4) | 279  (3) | 1815  (5) | 3665  (36) | 6344  (48) |  | 102525  (4504) | 12  (3) | 5  (2) | 110  (2) | 262  (19) | 389  (26) |
| Colon | 1672710  (11686) | 3179  (4) | 131  (3) | 1312  (6) | 6816  (46) | 11428  (59) |  | 159450  (6291) | 38  (3) | 2  (1) | 39  (4) | 431  (29) | 510  (38) |
| Liver | 629560  (5734) | 739  (3) | 43  (1) | 18  (2) | 1270  (23) | 2070  (29) |  | 86758  (2890) | 6  (2) | 1  (1) | -  (-) | 186  (11) | 193  (12) |
| Muscle | 2601576  (13532) | 4923  (6) | 835  (6) | 2803  (8) | 11962  (61) | 20523  (81) |  | 264019  (8238) | 83  (6) | 39  (3) | 91  (5) | 935  (39) | 1148  (53) |
| Pancreas | 1340449  (9660) | 2676  (5) | 151  (3) | 880  (7) | 3757  (38) | 7464  (53) |  | 131960  (5355) | 17  (4) | 4  (1) | 15  (2) | 325  (21) | 361  (28) |
| Pituitary | 1226884  (9146) | 1316  (5) | 129  (2) | 972  (3) | 3184  (31) | 5601  (41) |  | 112914  (4828) | 38  (4) | 3  (1) | 11  (1) | 288  (19) | 340  (25) |
| Small Intestine | 644573  (6681) | 661  (3) | 66  (2) | 190  (3) | 2570  (27) | 3487  (35) |  | 63307  (2946) | 25  (2) | 2  (1) | 3  (2) | 229  (17) | 259  (22) |
| Total† | 11209713  (23830) | 18205  (6) | 1837  (8) | 9257  (11) | 41778  (73) | 71077  (98) |  | 1128449  (14951) | 310  (6) | 62  (4) | 294  (6) | 3341  (46) | 4007  (62) |

\*Figure in parenthesis is the number of eGenes.

¶‘All’ indicates eQTL retrieved from GTEx, and ’Translation machinery’ indicates eQTL correspond to translation machinery-related genes.

§We used the data from GTEx release v8 and NHGRI-EBI GWAS catalog v1.0.2 released on 05/17/2022.

† Redundant eGenes were excluded for the total across all tissues

RNA polymerase I, POL I; RNA polymerase II, POL II; RNA polymerase III, POL III; ribosomal protein, RP