**Supplementary Table 1 Genes positively correlating with eGFR from darkturquoise and saddlebrown modules**

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| **GeneID** | **ORF** | **moduleColorsmydata** | **cor.eGFR..MDRD.** |
| 1007 | CDH9 | saddlebrown | 0.481617 |
| 10133 | OPTN | darkturquoise | 0.847814 |
| 10276 | NET1 | darkturquoise | 0.77606 |
| 10382 | TUBB4 | saddlebrown | 0.705549 |
| 10396 | ATP8A1 | darkturquoise | 0.50651 |
| 10650 | SLMO1 | saddlebrown | 0.812481 |
| 10808 | HSPH1 | darkturquoise | 0.645802 |
| 10814 | CPLX2 | darkturquoise | 0.303949 |
| 10865 | ARID5A | saddlebrown | 0.568425 |
| 10876 | FAM12A | darkturquoise | 0.374037 |
| 10882 | C1QL1 | darkturquoise | 0.7504 |
| 10924 | SMPDL3A | darkturquoise | 0.778387 |
| 1124 | CHN2 | darkturquoise | 0.879867 |
| 113251 | LARP4 | darkturquoise | 0.481994 |
| 114 | ADCY8 | darkturquoise | 0.611675 |
| 114876 | OSBPL1A | saddlebrown | 0.843621 |
| 1158 | CKM | darkturquoise | 0.628174 |
| 1185 | CLCN6 | darkturquoise | 0.85448 |
| 1363 | CPE | darkturquoise | 0.651234 |
| 147912 | SIX5 | darkturquoise | 0.560391 |
| 1571 | CYP2E1 | darkturquoise | 0.749879 |
| 1577 | CYP3A5 | darkturquoise | 0.618348 |
| 1737 | DLAT | darkturquoise | 0.646188 |
| 1831 | TSC22D3 | darkturquoise | 0.727392 |
| 1939 | LGTN | saddlebrown | 0.666615 |
| 1995 | ELAVL3 | darkturquoise | 0.666278 |
| 2118 | ETV4 | saddlebrown | 0.465727 |
| 2160 | F11 | darkturquoise | 0.500699 |
| 219595 | FOLH1B | darkturquoise | 0.831304 |
| 221443 | C6orf130 | saddlebrown | 0.799076 |
| 22796 | COG2 | saddlebrown | 0.579816 |
| 22872 | SEC31A | darkturquoise | 0.713196 |
| 22982 | DIP2C | darkturquoise | 0.781464 |
| 23024 | PDZRN3 | darkturquoise | 0.725139 |
| 23037 | PDZD2 | darkturquoise | 0.785134 |
| 23177 | CEP68 | saddlebrown | 0.780801 |
| 23210 | JMJD6 | darkturquoise | 0.580296 |
| 23366 | KIAA0895 | saddlebrown | 0.505717 |
| 2346 | FOLH1 | darkturquoise | 0.902054 |
| 23588 | KLHDC2 | saddlebrown | 0.658655 |
| 2525 | FUT3 | darkturquoise | 0.79227 |
| 25778 | DSTYK | darkturquoise | 0.650769 |
| 2593 | GAMT | darkturquoise | 0.652648 |
| 26051 | PPP1R16B | darkturquoise | 0.735995 |
| 26227 | PHGDH | darkturquoise | 0.793505 |
| 26273 | FBXO3 | saddlebrown | 0.749601 |
| 26973 | CHORDC1 | darkturquoise | 0.770732 |
| 27101 | CACYBP | saddlebrown | 0.675809 |
| 27141 | CIDEB | darkturquoise | 0.629824 |
| 27247 | NFU1 | saddlebrown | 0.702303 |
| 2730 | GCLM | saddlebrown | 0.446501 |
| 27329 | ANGPTL3 | darkturquoise | 0.881985 |
| 2852 | GPER | darkturquoise | 0.810864 |
| 28960 | DCPS | darkturquoise | 0.585292 |
| 2948 | GSTM4 | darkturquoise | 0.317581 |
| 2993 | GYPA | darkturquoise | 0.502988 |
| 29980 | DONSON | darkturquoise | 0.471991 |
| 30817 | EMR2 | darkturquoise | 0.547174 |
| 30848 | CTAG2 | darkturquoise | 0.357472 |
| 3213 | HOXB3 | darkturquoise | 0.751597 |
| 3224 | HOXC8 | darkturquoise | 0.749691 |
| 3273 | HRG | darkturquoise | 0.589923 |
| 3434 | IFIT1 | darkturquoise | 0.879934 |
| 3579 | IL8RB | darkturquoise | 0.46895 |
| 3643 | INSR | darkturquoise | 0.687192 |
| 3709 | ITPR2 | darkturquoise | 0.164763 |
| 3781 | KCNN2 | darkturquoise | 0.702987 |
| 3816 | KLK1 | darkturquoise | 0.606524 |
| 3948 | LDHC | darkturquoise | 0.359735 |
| 4023 | LPL | darkturquoise | 0.834748 |
| 4601 | MXI1 | saddlebrown | 0.720145 |
| 4706 | NDUFAB1 | saddlebrown | 0.499965 |
| 4711 | NDUFB5 | saddlebrown | 0.660694 |
| 4907 | NT5E | darkturquoise | 0.465596 |
| 5033 | P4HA1 | darkturquoise | 0.655732 |
| 50512 | PODXL2 | darkturquoise | 0.663349 |
| 50515 | CHST11 | saddlebrown | 0.647404 |
| 50861 | STMN3 | darkturquoise | 0.415093 |
| 509 | ATP5C1 | darkturquoise | 0.94202 |
| 51128 | SAR1B | darkturquoise | 0.686828 |
| 51162 | EGFL7 | darkturquoise | 0.637796 |
| 515 | ATP5F1 | darkturquoise | 0.81791 |
| 5151 | PDE8A | saddlebrown | 0.80027 |
| 51659 | GINS2 | darkturquoise | 0.214708 |
| 5167 | ENPP1 | darkturquoise | 0.638193 |
| 51778 | MYOZ2 | darkturquoise | 0.740009 |
| 5213 | PFKM | darkturquoise | 0.447881 |
| 5265 | SERPINA1 | darkturquoise | 0.175524 |
| 5269 | SERPINB6 | darkturquoise | 0.515997 |
| 5309 | PITX3 | darkturquoise | 0.730667 |
| 5350 | PLN | darkturquoise | 0.645712 |
| 5412 | UBL3 | darkturquoise | 0.826865 |
| 54363 | HAO1 | darkturquoise | 0.718019 |
| 54413 | NLGN3 | darkturquoise | 0.589659 |
| 54854 | FAM83E | darkturquoise | 0.736687 |
| 54855 | FAM46C | darkturquoise | 0.53331 |
| 54882 | ANKHD1 | saddlebrown | 0.553097 |
| 54885 | TBC1D8B | darkturquoise | 0.580615 |
| 55102 | ATG2B | saddlebrown | 0.712096 |
| 55151 | TMEM38B | darkturquoise | 0.62987 |
| 55219 | TMEM57 | saddlebrown | 0.640446 |
| 55240 | STEAP3 | darkturquoise | 0.616988 |
| 55650 | PIGV | saddlebrown | 0.647542 |
| 55699 | IARS2 | darkturquoise | 0.500177 |
| 55796 | MBNL3 | darkturquoise | 0.512483 |
| 5585 | PKN1 | saddlebrown | 0.414459 |
| 56062 | KLHL4 | saddlebrown | 0.779791 |
| 5683 | PSMA2 | saddlebrown | 0.549977 |
| 56920 | SEMA3G | darkturquoise | 0.576133 |
| 56942 | C16orf61 | saddlebrown | 0.628476 |
| 57113 | TRPC7 | darkturquoise | 0.82454 |
| 57213 | C13orf1 | darkturquoise | 0.646261 |
| 58511 | DNASE2B | darkturquoise | 0.843326 |
| 5864 | RAB3A | saddlebrown | 0.786377 |
| 5876 | RABGGTB | darkturquoise | 0.85565 |
| 5881 | RAC3 | saddlebrown | 0.887234 |
| 5914 | RARA | saddlebrown | 0.623796 |
| 60481 | ELOVL5 | darkturquoise | 0.759536 |
| 6119 | RPA3 | darkturquoise | 0.73564 |
| 6332 | SCN7A | darkturquoise | 0.517444 |
| 64319 | FBRS | darkturquoise | 0.67951 |
| 6484 | ST3GAL4 | darkturquoise | 0.446004 |
| 6510 | SLC1A5 | darkturquoise | 0.792633 |
| 6564 | SLC15A1 | saddlebrown | 0.662208 |
| 665 | BNIP3L | darkturquoise | 0.683009 |
| 6767 | ST13 | darkturquoise | 0.857855 |
| 6861 | SYT5 | darkturquoise | 0.548479 |
| 6990 | DYNLT3 | darkturquoise | 0.732627 |
| 7122 | CLDN5 | darkturquoise | 0.704054 |
| 7134 | TNNC1 | darkturquoise | 0.665337 |
| 7385 | UQCRC2 | darkturquoise | 0.54984 |
| 7432 | VIP | darkturquoise | 0.752699 |
| 7479 | WNT8B | darkturquoise | 0.869984 |
| 7757 | ZNF208 | darkturquoise | 0.363732 |
| 783 | CACNB2 | darkturquoise | 0.737811 |
| 79589 | RNF128 | darkturquoise | 0.463287 |
| 79614 | C5orf23 | darkturquoise | 0.768794 |
| 79836 | LONRF3 | darkturquoise | 0.534099 |
| 79839 | CCDC102B | saddlebrown | 0.559726 |
| 79864 | C11orf63 | saddlebrown | 0.866751 |
| 79876 | UBA5 | saddlebrown | 0.59172 |
| 80006 | C5orf44 | darkturquoise | 0.546766 |
| 80237 | ELL3 | darkturquoise | 0.607264 |
| 8031 | NCOA4 | darkturquoise | 0.923288 |
| 80329 | ULBP1 | darkturquoise | 0.536504 |
| 81616 | ACSBG2 | darkturquoise | 0.567816 |
| 81628 | TSC22D4 | darkturquoise | 0.750737 |
| 8193 | DPF1 | darkturquoise | 0.638907 |
| 8399 | PLA2G10 | darkturquoise | 0.636384 |
| 8411 | EEA1 | darkturquoise | 0.471983 |
| 8568 | RRP1 | saddlebrown | 0.404622 |
| 8570 | KHSRP | saddlebrown | 0.547916 |
| 8814 | CDKL1 | darkturquoise | 0.654356 |
| 900 | CCNG1 | darkturquoise | 0.830988 |
| 9049 | AIP | saddlebrown | 0.144517 |
| 9120 | SLC16A6 | darkturquoise | 0.620222 |
| 93081 | C13orf27 | saddlebrown | 0.899443 |
| 93129 | ORAI3 | darkturquoise | 0.685998 |
| 9317 | PTER | saddlebrown | 0.672311 |
| 9351 | SLC9A3R2 | darkturquoise | 0.522807 |
| 9513 | FXR2 | saddlebrown | 0.760576 |
| 9562 | MINPP1 | saddlebrown | 0.672949 |
| 9617 | MTRF1 | saddlebrown | 0.463547 |
| 9663 | LPIN2 | darkturquoise | 0.347934 |