Table 11 –Associations between Species, Sub-species, and Function CAGs versus RNA-seq PBMC GWAS enriched green module (n=43).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| **CAG number** | **SE category** | **beta (95% SE)** | **p-value** | **FDR** |
| CAG 1 | Species | -0.00935 (-0.04555,0.02685) | 0.609 | 0.609 |
| CAG 2 | Species | 0.0132 (-0.0268,0.0532) | 0.515 | 0.609 |
| CAG 3 | Species | -0.0632 (-0.1112,-0.0152) | **0.012** | **0.072** |
| CAG 4 | Species | 0.015 (-0.0338,0.0638) | 0.542 | 0.609 |
| CAG 5 | Species | 0.0311 (-0.0085,0.0707) | 0.125 | 0.375 |
| CAG 6 | Species | -0.0312 (-0.1056,0.0432) | 0.407 | 0.609 |
| CAG 1 | Sub-species | -0.026 (-0.0664,0.0144) | 0.206 | 0.42 |
| CAG 2 | Sub-species | 0.00155 (-0.04065,0.04375) | 0.942 | 0.942 |
| CAG 3 | Sub-species | 0.0382 (-0.037,0.1134) | 0.317 | 0.528 |
| CAG 4 | Sub-species | -0.0501 (-0.1237,0.0235) | 0.181 | 0.42 |
| CAG 5 | Sub-species | 0.00412 (-0.05788,0.06612) | 0.895 | 0.942 |
| CAG 6 | Sub-species | -0.0423 (-0.1087,0.0241) | 0.21 | 0.42 |
| CAG 7 | Sub-species | -0.0261 (-0.0619,0.0097) | 0.154 | 0.42 |
| CAG 8 | Sub-species | -0.108 (-0.2244,0.0084) | 0.0705 | 0.42 |
| CAG 9 | Sub-species | 0.00334 (-0.00566,0.01234) | 0.463 | 0.579 |
| CAG 10 | Sub-species | 0.0401 (-0.0537,0.1339) | 0.397 | 0.567 |
| CAG 1 | Function | -0.000259 (-0.001087,0.000569) | 0.535 | 0.952 |
| CAG 2 | Function | -0.000113 (-0.0003,0.000074) | 0.234 | 0.816 |
| CAG 3 | Function | 0.000038 (-0.000652,0.000728) | 0.913 | 0.995 |
| CAG 4 | Function | -0.000127 (-0.001293,0.001039) | 0.828 | 0.995 |
| CAG 5 | Function | 0.000017 (-0.000447,0.000481) | 0.941 | 0.995 |
| CAG 6 | Function | 0.000326 (-0.000482,0.001134) | 0.424 | 0.926 |
| CAG 7 | Function | -0.000266 (-0.00088,0.000348) | 0.391 | 0.906 |
| CAG 8 | Function | -0.000155 (-0.000605,0.000295) | 0.495 | 0.936 |
| CAG 9 | Function | 0.0015 (-0.000374,0.003374) | 0.118 | 0.815 |
| CAG 10 | Function | 0.000714 (-0.000466,0.001894) | 0.234 | 0.816 |
| CAG 11 | Function | -0.000485 (-0.001501,0.000531) | 0.346 | 0.874 |
| CAG 12 | Function | 0.000424 (-0.00071,0.001558) | 0.459 | 0.926 |
| CAG 13 | Function | -0.000031 (-0.000869,0.000807) | 0.941 | 0.995 |
| CAG 14 | Function | -0.000632 (-0.00158,0.000316) | 0.191 | 0.816 |
| CAG 15 | Function | 0.000637 (-0.000333,0.001607) | 0.198 | 0.816 |
| CAG 16 | Function | -0.000537 (-0.001233,0.000159) | 0.131 | 0.815 |
| CAG 17 | Function | -0.000832 (-0.001632,-0.000032) | 0.0443 | 0.815 |
| CAG 18 | Function | -0.000465 (-0.001103,0.000173) | 0.153 | 0.815 |
| CAG 19 | Function | -0.000189 (-0.001143,0.000765) | 0.693 | 0.974 |
| CAG 20 | Function | 0.000007 (-0.001203,0.001217) | 0.991 | 0.995 |
| CAG 21 | Function | 0.000178 (-0.000724,0.00108) | 0.696 | 0.974 |
| CAG 22 | Function | 0.00101 (-0.000322,0.002342) | 0.137 | 0.815 |
| CAG 23 | Function | 0.00016 (-0.001484,0.001804) | 0.847 | 0.995 |
| CAG 24 | Function | 0.000436 (-0.000724,0.001596) | 0.457 | 0.926 |
| CAG 25 | Function | -0.000353 (-0.001037,0.000331) | 0.308 | 0.867 |
| CAG 26 | Function | 0.000021 (-0.000347,0.000389) | 0.911 | 0.995 |
| CAG 27 | Function | -0.000063 (-0.000531,0.000405) | 0.788 | 0.995 |
| CAG 28 | Function | -0.000007 (-0.000491,0.000477) | 0.977 | 0.995 |
| CAG 29 | Function | -0.000521 (-0.001353,0.000311) | 0.218 | 0.816 |
| CAG 30 | Function | 0.000143 (-0.001213,0.001499) | 0.834 | 0.995 |
| CAG 31 | Function | 0.000002 (-0.000077,0.000081) | 0.961 | 0.995 |
| CAG 32 | Function | -0.000176 (-0.000336,-0.000016) | 0.0349 | 0.815 |
| CAG 33 | Function | 0.000061 (-0.000939,0.001061) | 0.904 | 0.995 |
| CAG 34 | Function | -0.000251 (-0.001381,0.000879) | 0.659 | 0.974 |
| CAG 35 | Function | 0.000374 (-0.000978,0.001726) | 0.584 | 0.973 |
| CAG 36 | Function | -0.000631 (-0.001293,0.000031) | 0.0643 | 0.815 |
| CAG 37 | Function | -0.000224 (-0.001006,0.000558) | 0.571 | 0.973 |
| CAG 38 | Function | 0.00045 (-0.000582,0.001482) | 0.388 | 0.906 |
| CAG 39 | Function | 0.000009 (-0.000029,0.000046) | 0.637 | 0.974 |
| CAG 40 | Function | 0.000129 (-0.001991,0.002249) | 0.904 | 0.995 |
| CAG 41 | Function | 0.000234 (-0.000064,0.000532) | 0.124 | 0.815 |
| CAG 42 | Function | -0.000552 (-0.001656,0.000552) | 0.324 | 0.871 |
| CAG 43 | Function | -0.000121 (-0.000801,0.000559) | 0.724 | 0.975 |
| CAG 44 | Function | -0.000106 (-0.000248,0.000036) | 0.144 | 0.815 |
| CAG 45 | Function | 0.000012 (-0.000018,0.000043) | 0.43 | 0.926 |
| CAG 46 | Function | -0.000273 (-0.001087,0.000541) | 0.506 | 0.937 |
| CAG 47 | Function | -0.000366 (-0.000924,0.000192) | 0.198 | 0.816 |
| CAG 48 | Function | -0.000611 (-0.003051,0.001829) | 0.618 | 0.974 |
| CAG 49 | Function | 0.000032 (-0.001836,0.0019) | 0.973 | 0.995 |
| CAG 50 | Function | 0.000012 (-0.000944,0.000968) | 0.981 | 0.995 |
| CAG 51 | Function | -0.000267 (-0.000961,0.000427) | 0.447 | 0.926 |
| CAG 52 | Function | 0.000579 (-0.000435,0.001593) | 0.261 | 0.831 |
| CAG 53 | Function | -0.000082 (-0.000189,0.000024) | 0.132 | 0.815 |
| CAG 54 | Function | -0.000088 (-0.000404,0.000229) | 0.583 | 0.973 |
| CAG 55 | Function | -0.000173 (-0.001087,0.000741) | 0.708 | 0.974 |
| CAG 56 | Function | -0.000032 (-0.00062,0.000556) | 0.914 | 0.995 |
| CAG 57 | Function | -0.000325 (-0.000851,0.000201) | 0.224 | 0.816 |
| CAG 58 | Function | 0.000248 (-0.00077,0.001266) | 0.629 | 0.974 |
| CAG 59 | Function | -0.000094 (-0.000332,0.000144) | 0.436 | 0.926 |
| CAG 60 | Function | 0.000015 (-0.000775,0.000805) | 0.97 | 0.995 |
| CAG 61 | Function | -0.00039 (-0.000922,0.000142) | 0.15 | 0.815 |
| CAG 62 | Function | -0.000205 (-0.000969,0.000559) | 0.595 | 0.973 |
| CAG 63 | Function | 0.000415 (-0.000747,0.001577) | 0.48 | 0.932 |
| CAG 64 | Function | 0.000022 (-0.000476,0.00052) | 0.93 | 0.995 |
| CAG 65 | Function | -0.000362 (-0.001454,0.00073) | 0.511 | 0.937 |
| CAG 66 | Function | -0.00037 (-0.002062,0.001322) | 0.664 | 0.974 |
| CAG 67 | Function | -0.00004 (-0.001048,0.000968) | 0.938 | 0.995 |
| CAG 68 | Function | -0.00002 (-0.000568,0.000528) | 0.941 | 0.995 |
| CAG 69 | Function | -0.000259 (-0.000442,-0.000076) | 0.00741 | 0.492 |
| CAG 70 | Function | -0.000093 (-0.000237,0.00005) | 0.201 | 0.816 |
| CAG 71 | Function | -0.000134 (-0.001772,0.001504) | 0.871 | 0.995 |
| CAG 72 | Function | -0.0016 (-0.003566,0.000366) | 0.113 | 0.815 |
| CAG 73 | Function | 0.000009 (-0.000037,0.000055) | 0.699 | 0.974 |
| CAG 74 | Function | -0.000494 (-0.001278,0.00029) | 0.216 | 0.816 |
| CAG 75 | Function | 0.00008 (-0.000828,0.000988) | 0.861 | 0.995 |
| CAG 76 | Function | -0.000436 (-0.001074,0.000202) | 0.181 | 0.816 |
| CAG 77 | Function | -0.000001 (-0.000395,0.000393) | 0.995 | 0.995 |
| CAG 78 | Function | -0.000374 (-0.001184,0.000436) | 0.362 | 0.876 |
| CAG 79 | Function | -0.00011 (-0.000598,0.000378) | 0.655 | 0.974 |
| CAG 80 | Function | -0.000133 (-0.000777,0.000511) | 0.683 | 0.974 |
| CAG 81 | Function | 0.000323 (-0.000429,0.001075) | 0.397 | 0.906 |
| CAG 82 | Function | -0.000069 (-0.000206,0.000067) | 0.317 | 0.871 |
| CAG 83 | Function | -0.000358 (-0.000966,0.00025) | 0.247 | 0.827 |
| CAG 84 | Function | 0.000008 (-0.000033,0.000049) | 0.707 | 0.974 |
| CAG 85 | Function | -0.000115 (-0.000357,0.000127) | 0.349 | 0.874 |
| CAG 86 | Function | 0.000029 (-0.000733,0.000791) | 0.94 | 0.995 |
| CAG 87 | Function | -0.000107 (-0.000238,0.000024) | 0.11 | 0.815 |
| CAG 88 | Function | -0.000398 (-0.000968,0.000172) | 0.172 | 0.816 |
| CAG 89 | Function | -0.0018 (-0.003148,-0.000452) | 0.0112 | 0.492 |
| CAG 90 | Function | -0.000644 (-0.001132,-0.000156) | 0.0122 | 0.492 |
| CAG 91 | Function | -0.000487 (-0.001109,0.000135) | 0.126 | 0.815 |
| CAG 92 | Function | -0.000749 (-0.001623,0.000125) | 0.0947 | 0.815 |
| CAG 93 | Function | 0.000051 (-0.000587,0.000689) | 0.873 | 0.995 |
| CAG 94 | Function | -0.000258 (-0.000896,0.00038) | 0.423 | 0.926 |
| CAG 95 | Function | -0.000282 (-0.00082,0.000256) | 0.301 | 0.867 |
| CAG 96 | Function | -0.000093 (-0.000617,0.000431) | 0.725 | 0.975 |
| CAG 97 | Function | -0.000379 (-0.001105,0.000347) | 0.304 | 0.867 |
| CAG 98 | Function | -0.000574 (-0.001364,0.000216) | 0.155 | 0.815 |
| CAG 99 | Function | 0.000191 (-0.000511,0.000893) | 0.589 | 0.973 |
| CAG 100 | Function | -0.000392 (-0.000812,0.000028) | 0.0699 | 0.815 |
| CAG 101 | Function | -0.000194 (-0.000602,0.000214) | 0.349 | 0.874 |
| CAG 102 | Function | -0.000272 (-0.000776,0.000232) | 0.287 | 0.867 |
| CAG 103 | Function | -0.00016 (-0.000988,0.000668) | 0.701 | 0.974 |
| CAG 104 | Function | -0.00043 (-0.001234,0.000374) | 0.291 | 0.867 |
| CAG 105 | Function | -0.00079 (-0.001716,0.000136) | 0.0963 | 0.815 |
| CAG 106 | Function | -0.000221 (-0.000915,0.000473) | 0.528 | 0.952 |
| CAG 107 | Function | 0.000007 (-0.000061,0.000075) | 0.838 | 0.995 |
| CAG 108 | Function | -0.000205 (-0.000787,0.000377) | 0.485 | 0.932 |
| CAG 109 | Function | -0.000492 (-0.000904,-0.00008) | 0.0219 | 0.662 |
| CAG 110 | Function | 0.00004 (-0.000528,0.000608) | 0.889 | 0.995 |
| CAG 111 | Function | 0.000223 (-0.000401,0.000847) | 0.48 | 0.932 |
| CAG 112 | Function | 0.000032 (-0.000214,0.000278) | 0.794 | 0.995 |
| CAG 113 | Function | -0.000083 (-0.000713,0.000547) | 0.794 | 0.995 |
| CAG 114 | Function | -0.000139 (-0.000637,0.000359) | 0.578 | 0.973 |
| CAG 115 | Function | -0.000072 (-0.000618,0.000474) | 0.795 | 0.995 |
| CAG 116 | Function | 0.000029 (-0.000019,0.000078) | 0.236 | 0.816 |
| CAG 117 | Function | -0.000743 (-0.001473,-0.000013) | 0.0494 | 0.815 |
| CAG 118 | Function | 0.000203 (-0.000689,0.001095) | 0.652 | 0.974 |
| CAG 119 | Function | -0.000076 (-0.000576,0.000424) | 0.762 | 0.995 |
| CAG 120 | Function | -0.000064 (-0.000174,0.000046) | 0.253 | 0.827 |
| CAG 121 | Function | 0.000273 (-0.000309,0.000855) | 0.354 | 0.874 |