Table X: Summary of modular eigenegene expression and distribution of candidate genes in modules

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Module color | Module ID | No. of genes | Ref. in Fig. X | Pattern | Tissues | Genes | Direction | GO term |
| black | M1 | 2956 | a |  |  |  |  |  |
| blue | M2 | 1747 | b |  |  | *Sirt2* |  |  |
| brown | M3 | 1084 | c |  |  |  |  |  |
| cyan | M4 | 507 | d |  |  |  |  |  |
| darkgreen | M5 | 199 | e | Image result for line | BO | *Atg1* |  |  |
| darkgrey | M6 | 309 | f |  |  |  |  |  |
| darkred | M7 | 84 | g | Image result for line | BO |  |  |  |
| darkturquoise | M8 | 79 | h |  |  |  |  |  |
| greenyellow | M9 | 165 | i |  |  |  |  |  |
| grey | M10 | 45 | j |  |  |  |  |  |
| lightcyan | M11 | 117 | k | Image result for lineImage result for line | BO vs H | *tgo* |  |  |
| lightgreen | M12 | 107 | l |  |  |  |  |  |
| lightyellow | M13 | 107 | m |  |  |  |  |  |
| pink | M14 | 382 | n | Image result for line | BO | *tub* |  |  |
| red | M15 | 787 | o |  | BO | *Ilp5* | (-) |  |
| royalblue | M16 | 132 | p | Image result for line | BO |  |  |  |
| salmon | M17 | 157 | q | Image result for line | BO |  |  |  |
| skyblue | M18 | 52 | r |  |  |  |  |  |
| steelblue | M19 | 44 | s |  |  |  |  |  |
| tan | M20 | 163 | t |  |  |  |  |  |
| turquoise | M21 | 3337 | u |  |  |  |  |  |
| white | M22 | 54 | v | Image result for line | B vs HO |  |  |  |

Table : Direction of regulation for key IIS, TOR and FOXO pathway genes in different diet-tissue combinations

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gene | Pathway | DR\_B | HS\_B | DR\_H | HS\_H | DR\_O | HS\_O | DRHS\_B | DRHS\_H | DRHS\_O |
| *Sirt2* | FOXO | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↓ | ↓ | ↑ |
| *p38* | FOXO | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↓ | ↓ |
| *cdk2* | FOXO | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ |
| *Gadd45* | FOXO | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ |
| *AMPKalpha* | FOXO, TOR | ↑ | ↑ | ↑ | ↑ | ↑ | ↑ | ↓ | ↓ | ↑ |
| *lin-28* | IIS | ↑ | ↑ | ↑ | ↑ | ↑↑ | ↑↑ | ↓ | ↑ | ↑↑ |
| *Ilp5* | IIS, FOXO | ↓↓ | ↓↓ | ↓ | ↓ | - | - | ↓↓ | ↓ | - |
| *Rheb* | IIS, TOR | - | ↑ | ↓↓↓ | ↑ | ↓ | ↓ | ↓ | ↓ | ↑ |
| *Myc* | IIS, TOR | ↓ | ↑ | ↑ | ↑ | ↓ | - | ↓ | ↓ | ↓ |
| *Atg1* | TOR | ↓ | ↑ | ↑ | ↑ | ↓ | ↑ | ↓ | ↓ | ↓ |
| *eIF4E1* | TOR | ↓ | ↓ | ↓ | ↓ | ↓ | ↓ | ↑ | ↑ | ↓ |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
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