

| Factor                                  | Q-value  | mean(LOD <sub>s</sub> ) | Covariate       |
|---|----------|-------------------------|-----------------|
| Lysine biosynthesis (00300)             | 6.37E-05 | 24.9                    | SNP II 479166   |
| Tryptophan metabolism (00380)           | 2.92E-02 | 51.1                    | SNP XV 850119   |
| Purine metabolism (00230)               | 1.81E-03 | 24.7                    | SNP XV 180961   |
| Aminoacyl-tRNA biosynthesis (00970)     | 4.05E-02 | 25.4                    | SNP XIV 449639  |
| Cell cycle - yeast (04111)              | 5.56E-04 | 37.0                    | Env             |
| N-Glycan biosynthesis (00510)           | 4.22E-02 | 11.4                    | SNP XIV 449639  |
| Oxidative phosphorylation (00190)       | 4.32E-02 | 43.2                    | Env             |
| Galactose metabolism (00052)            | 4.73E-02 | 14.4                    | SNP X 36810     |
| Fructose and mannose metabolism (00051) | 3.35E-02 | 30.7                    | SNP XII 1056103 |
| Metabolic pathways (01100)              | 0.00E+00 | 408.4                   | Env             |
| Fatty acid metabolism (00071)           | 6.35E-05 | 73.3                    | SNP I 52943     |
| Glycerophospholipid metabolism (00564)  | 1.77E-03 | 21.8                    | SNP II 608310   |