|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Table S2** | *p*(control,NRAS) | *p*(control,KRAS) | *p*(control,HRAS) | *p*(NRAS,KRAS) | *p*(NRAS,HRAS) | *p*(KRAS,HRAS) |
| Alanine | **6.0 x 10-4** | **4.5 x 10 -3** | 3.3 x 10-2 | 0.55 | 3.3 | 0.71 |
| Beta-alanine | 7.5 x 10-2 | **2.6 x 10-4** | 9.4 x 10-2 | 1.3 | 4.1 | 0.61 |
| Aspartate | 2.5 | **2.6 x 10-4** | 0.12 | **2.4 x 10-4** | 0.29 | 0.47 |
| Choline | **6.1 x 10-3** | **2.6 x 10-4** | 3.0 x 10-2 | 5.1 | 3.4 | 3.3 |
| Choline  Alfoscerate | 2.1 x 10-2 | 4.8 | 0.44 | **3.8 x 10-4** | 1.4 | 0.29 |
| CP## | 7.1 x 10-2 | 0.12 | 0.21 | 2.8 | 1.9 | 3.4 |
| Fumarate | **1.2 x 10-3** | **2.3 x 10-4** | **2.4 x 10-3** | 2.4 | 1.9 | 0.21 |
| Glutamine## | 1.6 | 1.1 x 10-2 | 0.20 | 1.7 x 10-2 | 0.96 | 1.0 x 10-2 |
| Myo-inositol | **1.9 x 10-7** | **1.4 x 10-5** | **2.4 x 10-6** | **1.6 x 10-3** | 1.6 | 6.7 x 10-2 |
| NAA | **1.1 x 10-3** | 1.3 x 10-2 | 3.2 | 2.8 | 0.33 | 0.67 |
| NAC | **3.7 x 10-4** | **6.3 x 10-3** | 1.7 x 10-2 | 0.78 | 1.8 x 10-2 | 0.55 |
| PC | **1.5 x 10-7** | **6.4 x 10-8** | **3.6 x 10-8** | **2.3 x 10-7** | **7.1 x 10-4** | **4.7 x 10-5** |
| Proline | **6.0 x 10-4** | **1.4 x 10-4** | 0.29 | 3.2 | 1.1 | 0.56 |
| Taurine | **2.5 x 10-7** | **1.4 x 10-6** | **1.5 x 10-7** | **1.8 x 10-3** | 5.0 | **3.4 x 10-3** |
| Tyrosine | 1.6 x 10-2 | 8.3 x 10-2 | **2.2 x 10-3** | 1.5 | 0.35 | 0.11 |
| UDP-X | **3.6 x 10-8** | **5.3 x 10-3** | **3.4 x 10-3** | 0.13 | **1.4 x 10-5** | 0.29 |

**Benjamini Y, Yekutieli D. 2001.** The control of the false discovery rate in multiple testing under dependency. *The Annals of Statistics* **29(4)**: 1165-1188.