## Toppfun分析

Table1 EMT基因富集通路

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Source** | **Hit Count in Query List** | **Hit Count in Genome** | **p-value** |
| MicroRNAs in cancer | BioSystems: KEGG | 155 | 299 | 4.55E-100 |
| Pathways in cancer | BioSystems: KEGG | 129 | 395 | 2.18E-53 |
| Proteoglycans in cancer | BioSystems: KEGG | 85 | 203 | 7.06E-45 |
| Breast cancer | BioSystems: KEGG | 59 | 144 | 9.81E-31 |
| Chronic myeloid leukemia | BioSystems: KEGG | 42 | 71 | 1.84E-30 |
| Interleukin-4 and 13 signaling | BioSystems: REACTOME | 52 | 114 | 5.50E-30 |
| Signaling by Interleukins | BioSystems: REACTOME | 116 | 531 | 2.66E-29 |
| AGE-RAGE signaling pathway in diabetic complications | BioSystems: KEGG | 48 | 99 | 2.75E-29 |
| Prostate cancer | BioSystems: KEGG | 45 | 87 | 4.29E-29 |
| Diseases of signal transduction | BioSystems: REACTOME | 93 | 373 | 4.37E-28 |
| Angiogenesis | PantherDB | 57 | 150 | 1.10E-27 |
| FoxO signaling pathway | BioSystems: KEGG | 53 | 132 | 3.38E-27 |
| EGFR tyrosine kinase inhibitor resistance | BioSystems: KEGG | 41 | 79 | 1.10E-26 |
| Renal cell carcinoma | BioSystems: KEGG | 37 | 65 | 3.92E-26 |
| Focal adhesion | BioSystems: KEGG | 63 | 199 | 2.33E-25 |
| Pancreatic cancer | BioSystems: KEGG | 36 | 64 | 3.28E-25 |
| Hepatitis B | BioSystems: KEGG | 53 | 144 | 4.91E-25 |
| Endocrine resistance | BioSystems: KEGG | 43 | 96 | 1.35E-24 |
| PI3K-Akt signaling pathway | BioSystems: KEGG | 83 | 342 | 2.83E-24 |
| Signaling pathways regulating pluripotency of stem cells | BioSystems: KEGG | 51 | 139 | 4.64E-24 |

Table2 EMT基因富集的疾病

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Name** | **Source** | **p-value** | **q-value FDR B&H** | **Hit Count in Query List** | **Hit Count in Genome** |
| Secondary malignant neoplasm of lymph node | DisGeNET BeFree | 1.55E-214 | 1.75E-210 | 430 | 1283 |
| Pancreatic carcinoma | DisGeNET Curated | 1.40E-196 | 7.87E-193 | 479 | 1774 |
| Malignant neoplasm of pancreas | DisGeNET Curated | 3.77E-196 | 1.42E-192 | 473 | 1730 |
| Malignant neoplasm of ovary | DisGeNET Curated | 5.40E-182 | 1.52E-178 | 480 | 1911 |
| Malignant tumor of colon | DisGeNET Curated | 5.70E-178 | 1.29E-174 | 476 | 1915 |
| Mammary Neoplasms | DisGeNET Curated | 1.56E-177 | 2.93E-174 | 480 | 1953 |
| Glioblastoma | DisGeNET Curated | 8.54E-156 | 1.38E-152 | 443 | 1851 |
| Squamous cell carcinoma | DisGeNET Curated | 1.03E-153 | 1.45E-150 | 417 | 1655 |
| Adenocarcinoma of lung (disorder) | DisGeNET Curated | 4.58E-142 | 5.73E-139 | 309 | 955 |
| Osteosarcoma | DisGeNET Curated | 1.40E-136 | 1.58E-133 | 306 | 973 |
| Osteosarcoma of bone | DisGeNET BeFree | 7.45E-135 | 7.63E-132 | 298 | 932 |
| Epithelial ovarian cancer | DisGeNET Curated | 1.30E-134 | 1.22E-131 | 328 | 1140 |
| Secondary malignant neoplasm of lung | DisGeNET BeFree | 3.35E-133 | 2.91E-130 | 255 | 677 |
| Carcinoma of bladder | DisGeNET Curated | 5.82E-133 | 4.69E-130 | 319 | 1089 |
| Malignant neoplasm of urinary bladder | DisGeNET Curated | 8.60E-132 | 6.47E-129 | 311 | 1042 |
| Bladder Neoplasm | DisGeNET Curated | 2.04E-130 | 1.44E-127 | 319 | 1109 |
| Adenocarcinoma | DisGeNET Curated | 8.43E-128 | 5.59E-125 | 375 | 1564 |
| Triple Negative Breast Neoplasms | DisGeNET BeFree | 9.31E-128 | 5.83E-125 | 234 | 588 |
| Squamous cell carcinoma of esophagus | DisGeNET Curated | 1.04E-119 | 6.19E-117 | 286 | 961 |
| Tumor Angiogenesis | DisGeNET BeFree | 2.36E-118 | 1.33E-115 | 211 | 511 |

Table3