Supplementary Table 1 Details of the GEO datasets included in this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Datasets**  | **References**  | **Platform**  | **Sample size (tumor/control)** | **Application** |
| GSE85217 | [Florence MC](https://pubmed.ncbi.nlm.nih.gov/?term=Cavalli+FMG&cauthor_id=28609654)G et al[1]. | [HuGene-1\_1-st] Affymetrix Human Gene 1.1 ST Array [transcript (gene) version] | 763 (tumor) | **Explore clinical relevance** |
| GSE30074 | [Park W](https://www.ncbi.nlm.nih.gov/pubmed/?term=Park%20W%5bAuthor%5d) et al[2] . | [HuGene-1\_0-st] Affymetrix Human Gene 1.0 ST Array [transcript (gene) version] | 30 (tumor) | **Explore clinical relevance** |
| GSE21104 | Northcott PA et al[3] | [HuEx-1\_0-st] Affymetrix Human Exon 1.0 ST Array [transcript (gene) version] | 103 （tumor） | **Explore clinical relevance** |
| GSE73066 | [Zakrzewski K](https://www.ncbi.nlm.nih.gov/pubmed/?term=Zakrzewski%20K%5bAuthor%5d)[4]. | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 47 (control)  | **Validation delta-catenin expression** |
| GSE44971 | [Lambert SR](https://www.ncbi.nlm.nih.gov/pubmed/?term=Lambert%20SR%5bAuthor%5d)[5]. | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 9 (control) | **Validation delta-catenin expression** |
| GSE10327 | Kool M[6]. | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 62 (tumor) | **Validation delta-catenin expression** |
| GSE49243 | Pfister S[7]. | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 73 (tumor) | **Validation delta-catenin expression** |
| GSE50161 | Griesinger AM[8]. | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 13 (tumor)/5 (control) | **Validation delta-catenin expression** |
| GSE66354 | [Donson AM](https://www.ncbi.nlm.nih.gov/pubmed/?term=Donson%20AM%5bAuthor%5d)[9] | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 19 (tumor)/2 (control) | **DEGs analysis** |
| GSE86574 | Andrew M Donson[10] | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 17 (tumor)/5 (control) | **DEGs analysis** |
| GSE74195 | [de Bont JM](https://www.ncbi.nlm.nih.gov/pubmed/?term=de%20Bont%20JM%5bAuthor%5d)[11] | [HG-U133\_Plus\_2] Affymetrix Human Genome U133 Plus 2.0 Array | 23 (tumor)/5 (control) | **DEGs analysis** |

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