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| **Supplement Table 1** The H19 expression in different drug-resistant tumors |
| Cancer type | Drug | Cell lines | Gene expression | Average | Expression in drug resistant cells | p value | Country | GEO Accession | Ref |
| Breast cancer | TAM | MCF7 B7TAMS-1 | 10.170 | 9.283 | High | p<0.05(\*) | USA | GSE26459 | [1] |
| MCF7 B7TAMS-2 | 9.260 |
| MCF7 B7TAMS-3 | 8.420 |
| MCF7 G11TAMR-1 | 19.070 | 19.270 |
| MCF7 G11TAMR-2 | 15.830 |
| MCF7 G11TAMR-3 | 22.910 |
| BT474 TAMS-1 | 0.480 | 0.467 | High | p<0.05(\*) | USA | GSE112883 | [2] |
| BT474 TAMS-2 | 0.450 |
| BT474 TAMS-3 | 0.470 |
| BT474 TAMR-1 | 1.130 | 1.037 |
| BT474 TAMR-2 | 1.130 |
| BT474 TAMR-3 | 0.850 |
| Methotrexate | MCF7 MTXS-1 | 640.300 | 678.933 | High | p<0.001(\*\*\*) | Spain | GSE16070 | [3] |
| MCF7 MTXS-2 | 732.400 |
| MCF7 MTXS-3 | 664.100 |
| MCF7 MTXR-1 | 6347.700 | 5693.733 |
| MCF7 MTXR-2 | 5696.200 |
| MCF7 MTXR-3 | 5037.300 |
| MDA-MB-468 MTXS-1 | 116.850 | 119.883 | Low | p<0.001(\*\*\*) | Spain | GSE16080 | [3] |
| MDA-MB-468 MTXS-2 | 138.350 |
| MDA-MB-468 MTXS-3 | 104.450 |
| MDA-MB-468 MTXR-1 | 26.250 | 16.217 |
| MDA-MB-468 MTXR-2 | 10.800 |
| MDA-MB-468 MTXR-3 | 11.600 |
| Epirubicin | MDA-MB-231-EPIS-1 | -0.780 | 1.109 | High | p<0.001(\*\*\*) | Canada | GSE54326 | [4] |
| MDA-MB-231-EPIS-2 | -6.373 |
| MDA-MB-231-EPIS-3 | 10.480 |
| MDA-MB-231-EPIR-1 | 82.430 | 77.320 |
| MDA-MB-231-EPIR-2 | 65.040 |
| MDA-MB-231-EPIR-3 | 84.490 |
| MCF7 EPIS-1 | 1138.490 | 1146.337 | Low | p<0.05(\*) |
| MCF7 EPIS-2 | 1168.080 |
| MCF7 EPIS-3 | 1132.440 |
| MCF7 EPIR-1 | 849.190 | 926.923 |
| MCF7 EPIR-2 | 989.260 |
| MCF7 EPIR-3 | 942.320 |
| SKBR3 EPIS-1 | 11272.280 | 11079.683 | High | p<0.05(\*) |
| SKBR3 EPIS-2 | 11246.100 |
| SKBR3 EPIS-3 | 10720.670 |
| SKBR3 EPIR-1 | 15776.250 | 17192.327 |
| SKBR3 EPIR-2 | 18239.240 |
| SKBR3 EPIR-3 | 17561.490 |
| ZR75-1 EPIS-1 | -4.010 | -1.081 | NS | 0.161 |
| ZR75-1 EPIS-2 | -0.231 |
| ZR75-1 EPIS-3 | 0.997 |
| ZR75-1 EPIR-1 | -11.510 | -8.250 |
| ZR75-1 EPIR-2 | -11.860 |
| ZR75-1 EPIR-3 | -1.380 |
| Lung Cancer | gefitinib | HCC4006-GefS-1 | 84.090 | 83.193 | NS | 0.338 | Spain | GSE123066 | Missing |
| HCC4006-GefS-2 | 88.190 |
| HCC4006-GefS-3 | 77.300 |
| HCC4006-GefR-1 | 85.330 | 87.330 |
| HCC4006-GefR-2 | 91.080 |
| HCC4006-GefR-3 | 85.580 |
| Colon Cancer | MTX | HT29 MTXS-1 | 2.250 | 6.400 | NS | 0.703 | Spain | GSE11440 | [3], [5], [6] |
| HT29 MTXS-2 | 8.100 |
| HT29 MTXS-3 | 8.850 |
| HT29 MTXR-1 | 6.700 | 5.383 |
| HT29 MTXR-2 | 6.600 |
| HT29 MTXR-3 | 2.850 |
| Caco2 MTXS-1 | 10.600 | 9.450 | NS | 0.194 | Spain | GSE16066 | [3] |
| Caco2 MTXS-2 | 10.750 |
| Caco2 MTXS-3 | 7.000 |
| Caco2 MTXR-1 | 5.500 | 5.600 |
| Caco2 MTXR-2 | 2.150 |
| Caco2 MTXR-3 | 9.150 |
| oxaliplatin | HCT116 OXAS-1 | 8.290 | 8.227 | Low | p<0.01(\*\*) | Denmark | GSE42387 | [7] |
| HCT116 OXAS-2 | 8.340 |
| HCT116 OXAS-3 | 8.050 |
| HCT116 OXAR-1 | 7.420 | 7.450 |
| HCT116 OXAR-2 | 7.650 |
| HCT116 OXAR-3 | 7.280 |
| HT29 OXAS-1 | 6.540 | 6.603 | Low | p<0.05(\*) |
| HT29 OXAS-2 | 6.670 |
| HT29 OXAS-3 | 6.600 |
| HT29 OXAR-1 | 6.510 | 6.487 |
| HT29 OXAR-2 | 6.480 |
| HT29 OXAR-3 | 6.470 |
| LoVo OXAS-1 | 6.520 | 6.557 | High | p<0.05(\*) |
| LoVo OXAS-2 | 6.630 |
| LoVo OXAS-3 | 6.520 |
| LoVo OXAR-1 | 7.540 | 7.557 |
| LoVo OXAR-2 | 7.850 |
| LoVo OXAR-3 | 7.280 |
| irinotecan | HCT116-IRIS-1 | 8.290 | 8.227 | Low | p<0.01(\*\*) | Denmark | GSE42387 | [7] |
| HCT116-IRIS-2 | 8.340 |
| HCT116-IRIS-3 | 8.050 |
| HCT116-IRIR-1 | 7.540 | 7.533 |
| HCT116-IRIR-2 | 7.600 |
| HCT116-IRIR-3 | 7.460 |
| Ovarian Cancer | cisplatin | OVSAHO-CISS-1 | 8.170 | 8.330 | Low | p<0.05(\*) | Italy | GSE93795 | [8] |
| OVSAHO-CISS-2 | 8.490 |
| OVSAHO-CISR-1 | 7.050 | 6.870 |
| OVSAHO-CISR-2 | 6.690 |
| A2780 CISS-1 | 5.320 | 5.500 | High | p<0.001(\*\*\*) | UK | GSE28648 | [9] |
| A2780 CISS-2 | 5.420 |
| A2780 CISS-3 | 5.760 |
| CP70 CISR-1 | 9.140 | 9.510 |
| CP70 CISR-2 | 9.930 |
| CP70 CISR-3 | 9.460 |
| IGROV-1 CISS-1 | 244.350 | 293.800 | High | p<0.01(\*\*) | Italy | GSE58472 | [10] |
| IGROV-1 CISS-2 | 362.050 |
| IGROV-1 CISS-3 | 275.000 |
| IGROV-1 CISR-1 | 730.480 | 716.767 |
| IGROV-1 CISR-2 | 711.820 |
| IGROV-1 CISR-3 | 708.000 |
| oxaliplatin | IGROV-1 OXAS-1 | 244.350 | 293.800 | High | p<0.05(\*) |
| IGROV-1 OXAS-2 | 362.050 |
| IGROV-1 OXAS-3 | 275.000 |
| IGROV-1 OXAR-1 | 525.620 | 561.033 |
| IGROV-1 OXAR-2 | 690.750 |
| IGROV-1 OXAR-3 | 466.730 |
| Pancreatic Cancer | MTX | PaCa2 MTXS-1 | 45.750 | 60.000 | NS | 0.377 | Spain | GSE16082 | [3] |
| PaCa2 MTXS-2 | 64.950 |
| PaCa2 MTXS-3 | 69.300 |
| PaCa2 MTXR-1 | 49.300 | 77.267 |
| PaCa2 MTXR-2 | 82.150 |
| PaCa2 MTXR-3 | 100.350 |
| Erythtoblastic Leukemia | MTX | K562 MTXS-1 | 55.900 | 55.500 | Low | p<0.01(\*\*) | Spain | GSE16085 | [3] |
| K562 MTXS-2 | 66.000 |
| K562 MTXS-3 | 44.600 |
| K562 MTXR-1 | 2.850 | 6.417 |
| K562 MTXR-2 | 10.800 |
| K562 MTXR-3 | 5.600 |
| Osteosarcoma | MTX | Saos-2 MTXS-1 | 10.150 | 5.383 | NS | 0.094 | Spain | GSE16089 | [3] |
| Saos-2 MTXS-2 | 4.500 |
| Saos-2 MTXS-3 | 1.500 |
| Saos-2 MTXR-1 | 30.150 | 21.017 |
| Saos-2 MTXR-2 | 10.600 |
| Saos-2 MTXR-3 | 22.300 |
| Gestational Trophoblastic Neoplasia | MTX | JEG-3 MTXS-1 | 6.290 | 8.243 | NS | 0.121 | USA | GSE88873 | Missing |
| JEG-3 MTXS-2 | 6.990 |
| JEG-3 MTXS-3 | 11.450 |
| JEG-3 MTXR-1 | 12.880 | 12.387 |
| JEG-3 MTXR-2 | 12.230 |
| JEG-3 MTXR-3 | 12.050 |
| Glioblastoma | temozolomide | LN229-TMZS-1 | 6.530 | 6.493 | Low | p<0.001(\*\*\*) | China | GSE113510 | [11] |
| LN229-TMZS-2 | 6.470 |
| LN229-TMZS-3 | 6.480 |
| LN229-TMZR-1 | 4.480 | 4.457 |
| LN229-TMZR-2 | 4.390 |
| LN229-TMZR-3 | 4.500 |

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