**Appendix Table 1.** Colony number counts for clonogenic assays done with transfected SK-N-AS cells.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **non transfected** | | | |  |  | **control transfected** | | | |
|  | Experiment no. | 1 | 2 | 3 | 4 |  | Experiment no. | 1 | 2 | 3 | 4 |
| **Sham IR** | Cells seeded | 1500 | 3000 | 1000 | 4000 | **Sham IR** | Cells seeded | 1500 | 3000 | 1000 | 4000 |
| Density (cells/cm2) | 156.25 | 312.5 | 104.17 | 416.67 | Density (cells/cm2) | 156.25 | 312.5 | 104.17 | 416.67 |
| Cells grew | 7 | 17 | 113 | 32 | Cells grew | 9 | 4 | 102 | 50 |
| 6 | 23 | 87 | 43 | 11 | 4 | 117 | 43 |
| 11 | 15 | 117 | 38 | 9 | 2 | 113 | 46 |
| 12 | 23 | 102 | 40 | 13 | 9 | 97 | 57 |
| 10 | 24 | 119 | 45 | 16 | 8 | 105 | 48 |
| 4 | 11 | 126 | 27 | 8 | 4 | 98 | 49 |
| 8 | 22 | 113 | 44 | 18 | 4 | 103 | 44 |
| 10 | 20 | 97 | 38 | 7 | 3 | 115 | 49 |
| Avg. colony no. | 8.5 | 19.375 | 109.25 | 38.375 | Avg colony no. | 11.375 | 4.75 | 106.25 | 48.25 |
|  | Average percent | 0.566667 | 0.645833 | 10.925 | 0.959375 |  | Average percent | 0.758333 | 0.158333 | 10.625 | 1.20625 |
|  |  | **non transfected** | | | |  |  | **control transfected** | | | |
| **4 Gy low dose** | Experiment no. | 1 | 2 | 3 | 4 | **4 Gy low dose** | Experiment no. | 1 | 2 | 3 | 4 |
| Cells seeded | 4000 | 7000 | 4000 | 8000 | Cells seeded | 4000 | 7000 | 4000 | 8000 |
| Density (cells/cm2) | 416.67 | 729.17 | 416.67 | 833.33 | Density (cells/cm2) | 416.67 | 729.17 | 416.67 | 833.33 |
| Cells grew | 20 | 32 | 163 | 72 | Cells grew | 13 | 25 | 137 | 68 |
| 20 | 31 | 152 | 58 | 13 | 33 | 151 | 75 |
| 24 | 28 | 148 | 73 | 21 | 37 | 150 | 78 |
| 29 | 28 | 147 | 52 | 25 | 28 | 139 | 77 |
| 26 | 32 | 152 | 59 | 17 | 27 | 169 | 77 |
| 12 | 17 | 150 | 51 | 12 | 29 | 140 | 78 |
| 25 | 25 | 149 | 45 | 14 | 28 | 139 | 66 |
| 23 | 25 | 158 | 56 | 13 | 23 | 140 | 69 |
| Avg. colony no. | 22.375 | 27.25 | 152.375 | 58.25 | Avg. colony no. | 16 | 28.75 | 145.625 | 73.5 |
|  | Average percent | 0.559375 | 0.389286 | 3.809375 | 0.728125 |  | Average percent | 0.4 | 0.410714 | 3.640625 | 0.91875 |
|  |  | **non transfected** | | | |  |  | **control transfected** | | | |
| **6 Gy high dose** | Experiment no. | 1 | 2 | 3 | 4 | **6 Gy high dose** | Experiment no. | 1 | 2 | 3 | 4 |
| Cells seeded | - | 7000 | 8000 | 8000 | Cells seeded | - | 7000 | 8000 | 8000 |
| Density (cells/cm2) |  | 729.17 | 833.33 | 833.33 | Density (cells/cm2) |  | 729.17 | 833.33 | 833.33 |
| Cells grew | - | 3 | 124 | 43 | Cells grew | - | 8 | 131 | 56 |
|  | 5 | 117 | 35 |  | 5 | 134 | 83 |
|  | 7 | 130 | 53 |  | 5 | 134 | 54 |
|  | 3 | 130 | 35 |  | 9 | 146 | 55 |
|  | 4 | 131 | 48 |  | 8 | 135 | 62 |
|  | 7 | 136 | 41 |  | 10 | 118 | 56 |
|  | 2 | 123 | 43 |  | 0 | 107 | 57 |
|  | 3 | 135 | 49 |  | 4 | 133 | 61 |
| Avg. colony no. | - | 4.25 | 128.25 | 43.375 | Avg. colony no. | - | 6.125 | 129.75 | 60.5 |
|  | Average percent |  | 0.060714 | 1.603125 | 0.542188 |  | Average percent |  | 0.0875 | 1.621875 | 0.75625 |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **miR-34a transfected** | | | |  |  | **miR-1228 transfected** | | | |
|  | Experiment no. | 1 | 2 | 3 | 4 |  | Experiment no. | 1 | 2 | 3 | 4 |
| **Sham IR** | Cells seeded | 1500 | 3000 | 1000 | 4000 | **Sham IR** | Cells seeded | 1500 | 3000 | 1000 | 4000 |
| Density (cells/cm2) | 156.25 | 312.5 | 104.17 | 416.67 | Density (cells/cm2) | 156.25 | 312.5 | 104.17 | 416.67 |
| Cells grew | 9 | 4 | 103 | 51 | Cells grew | 2 | 4 | 151 | 48 |
| 14 | 6 | 77 | 49 | 10 | 4 | 161 | 48 |
| 11 | 8 | 95 | 50 | 3 | 2 | 120 | 51 |
| 18 | 7 | 99 | 61 | 9 | 9 | 157 | 49 |
| 16 | 4 | 112 | 52 | 13 | 8 | 151 | 46 |
| 5 | 5 | 97 | 46 | 13 | 4 | 141 | 36 |
| 7 | 5 | 94 | 39 | 5 | 4 | 114 | 45 |
| 7 | 3 | 80 | 47 | 10 | 3 | 137 | 48 |
| Avg. colony no. | 10.875 | 5.25 | 94.625 | 49.375 | Avg. colony no. | 8.125 | 4.75 | 141.5 | 46.375 |
|  | Average percent | 0.725 | 0.175 | 9.4625 | 1.234375 |  | Average percent | 0.541667 | 0.158333 | 14.15 | 1.159375 |
|  |  | **miR-34a transfected** | | | |  |  | **miR-1228 transfected** | | | |
| **4 Gy low dose** | Experiment no. | 1 | 2 | 3 | 4 | **4 Gy low dose** | Experiment no. | 1 | 2 | 3 | 4 |
| Cells seeded | 4000 | 7000 | 4000 | 8000 | Cells seeded | 4000 | 7000 | 4000 | 8000 |
| Density (cells/cm2) | 416.67 | 729.17 | 416.67 | 833.33 | Density (cells/cm2) | 416.67 | 729.17 | 416.67 | 833.33 |
| Cells grew | 48 | 9 | 157 | 80 | Cells grew | 31 | 12 | 110 | 91 |
| 40 | 6 | 167 | 78 | 41 | 16 | 137 | 90 |
| 38 | 11 | 175 | 92 | 23 | 6 | 115 | 90 |
| 45 | 16 | 154 | 81 | 44 | 11 | 130 | 82 |
| 35 | 26 | 173 | 89 | 25 | 13 | 149 | 81 |
| 30 | 18 | 167 | 74 | 19 | 6 | 126 | 73 |
| 44 | 12 | 160 | 83 | 25 | 7 | 112 | 83 |
| 40 | 13 | 138 | 91 | 42 | 11 | 117 | 71 |
| Average colony no. | 40 | 13.875 | 161.375 | 83.5 | Average colony no. | 31.25 | 10.25 | 124.5 | 82.625 |
|  | Average percent | 1 | 0.198214 | 4.034375 | 1.04375 |  | Average percent | 0.78125 | 0.146429 | 3.1125 | 1.032813 |
|  |  | **miR-34a transfected** | | | |  |  | **miR-1228 transfected** | | | |
| **6 Gy high dose** | Experiment no. | 1 | 2 | 3 | 4 | **6 Gy high dose** | Experiment no. | 1 | 2 | 3 | 4 |
| Cells seeded | - | 7000 | 8000 | 8000 | Cells seeded | - | 7000 | 8000 | 8000 |
| Density (cells/cm2) |  | 729.17 | 833.33 | 833.33 | Density (cells/cm2) |  | 729.17 | 833.33 | 833.33 |
| Cells grew | - | 11 | 127 | 21 | Cells grew | - | 14 | 113 | 38 |
|  | 12 | 136 | 34 |  | 14 | 100 | 40 |
|  | 12 | 128 | 25 |  | 10 | 114 | 47 |
|  | 14 | 129 | 36 |  | 7 | 119 | 55 |
|  | 16 | 166 | 39 |  | 9 | 115 | 44 |
|  | 12 | 121 | 41 |  | 5 | 113 | 44 |
|  | 12 | 112 | 36 |  | 6 | 114 | 39 |
|  | 11 | 117 | 39 |  | 7 | 135 | 31 |
| Average colony no. | - | 12.5 | 129.5 | 33.875 | Average colony no. | - | 9 | 115.375 | 42.25 |
|  | Average percent |  | 0.178571 | 1.61875 | 0.423438 |  | Average percent |  | 0.128572 | 1.442188 | 0.528125 |