

## Treatment with novel topoisomerase inhibitors in Ewing sarcoma models reveals heterogeneity of tumor response

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**Supplemental Table S1. Key Reagents**

| Reagent                     | Identifier and Other Information          | Source                          |
|-----------------------------|-------------------------------------------|---------------------------------|
| <b>Compounds/Drugs</b>      |                                           |                                 |
| LMP400                      | TOP1 inhibitor                            | DTP, NCI                        |
| LMP744                      | TOP1 inhibitor                            | DTP, NCI                        |
| LMP776                      | TOP1 inhibitor                            | DTP, NCI                        |
| Irinotecan                  | TOP1 inhibitor                            | NIH Veterinary Pharmacy         |
|                             |                                           |                                 |
| <b>Antibodies</b>           |                                           |                                 |
| GAPDH-HRP                   | Sc-47724 (1:2000)                         | Cell Signaling Technology (CST) |
| Vinculin                    | 13901 (1:2000)                            | CST                             |
| PARP1                       | #9542 (1:1000)                            | CST                             |
| Caspase 3                   | #9662 (1:1000)                            | CST                             |
| $\gamma$ -H2AX              | #80312 (1:1000)                           | CST                             |
| P16 INK4A                   | #80772 (1:1000)                           | CST                             |
| SIRT1                       | #9475 (1:1000)                            | CST                             |
| DDB2                        | #5416 (1:1000)                            | CST                             |
| PDE4B                       | #72096 (1:500)<br>24h extended incubation | CST                             |
| P21                         | #2947 (1:1000)                            | CST                             |
| FGFR2                       | #6930 (1:500)<br>24h extended incubation  | Santa Cruz                      |
| NECTIN1                     | 37-5900 (1:1000)                          | Thermo Fisher Scientific        |
| DBI                         | 144490-1-AP (1:1000)                      | Proteintech                     |
| TSPAN8                      | Ab70007 (1:1000)                          | Abcam                           |
| TENM2                       | AF4578-SP (1:1000)                        | R&D Systems                     |
| ACSF2                       | 16140-1-AP (1:1000)                       | Proteintech                     |
| GBGT1                       | PA5-116392 (1:1000)                       | Thermo Fisher Scientific        |
| SRSF8                       | PA5-41917 (1:1000)                        | Thermo Fisher Scientific        |
| Anti-mouse                  | 7076S                                     | CST                             |
| Anti-rabbit                 | 7074S                                     | CST                             |
| Anti-sheep                  | #A16041                                   | Thermo Fisher Scientific        |
| CD99                        | MA5-16416 (1:500)                         | Thermo Fisher Scientific        |
|                             |                                           |                                 |
| <b>Chemicals (in-vitro)</b> |                                           |                                 |
| RPMI Medium                 | 21870-084                                 | Thermo Fisher Scientific        |
| Fetal Bovine Serum          | 12306C-500ML                              | Sigma Aldrich                   |
| Penicillin-Streptomycin     | 15140-122                                 | Thermo Fisher Scientific        |
| L-glutamine (100X)          | 25030-081                                 | Thermo Fisher Scientific        |
| Trypsin-EDTA (0.25%)        | 25200-056                                 | Thermo Fisher Scientific        |
| Trypsin-EDTA (0.05%)        | 25300-054                                 | Thermo Fisher Scientific        |
| Protease Inhibitor Cocktail | 78446                                     | Thermo Fisher Scientific        |

|                                                   |             |                          |
|---------------------------------------------------|-------------|--------------------------|
| 1X RIPA Lysis and Extraction Buffer               | 89901       | Thermo Fisher Scientific |
| 4X LDS Sample Loading Buffer                      | NP0007      | Thermo Fisher Scientific |
| 10X Sample Reducing Agent                         | NP0009      | Thermo Fisher Scientific |
| Skim Milk Powder                                  | Sc-2325     | ChemCruz                 |
| SuperSignal West Pico Chemiluminescent substrate  | 34580       | Thermo Fisher Scientific |
| SuperSignal West Femto Chemiluminescent substrate | 34096       | Thermo Fisher Scientific |
| Tween20                                           | P1379-500ML | Sigma Aldrich            |
| MOPS SDS Running Buffer (20X)                     | NP0001      | Thermo Fisher Scientific |
| NuPAGE Transfer Buffer (20X)                      | NP00061     | Thermo Fisher Scientific |
| Tris Buffered Saline, 10 X                        | 5460-0037   | SeraCare Life Sciences   |
| 0.1 % Triton X-100                                |             | Millipore Sigma          |
| Propidium Iodide                                  | P4864-10ML  | Sigma Aldrich            |
| Phosphate buffered Saline                         | 14190-144   | Thermo Fisher Scientific |
| DNase-free RNase A                                | R5503       | Millipore Sigma          |
| T-PER Tissue Protein Extraction Reagent           | #78510      | Thermo Fisher Scientific |
| <b>Chemicals (in-vivo)</b>                        |             |                          |
| Hank's balanced salt solution                     | 14025134    | ThermoFisher Scientific  |
| HCl                                               | H1758       | Sigma Aldrich            |
| Dextrose                                          | D9434       | Sigma Aldrich            |
| Matrigel                                          | 354248      | Corning                  |
| Citric acid                                       | 1.93026     | Sigma Aldrich            |
| <b>Commercial Assays</b>                          |             |                          |
| BCA Kit                                           | 23225       | Thermo Fisher Scientific |
| AllPrep DNA/RNA Micro Kit                         | #80284      | Qiagen                   |
| RNase-Free DNase Set                              | #79254      | Qiagen                   |
| TissueRuptor II system                            |             | Qiagen                   |
| CometAssay Single Cell Assay                      | 4250-050-K  | Bio-Techne               |
| Annexin V-FITC Assay Kit                          | 600300      | Cayman Chemical Company  |