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Supplemental Information

EZH2 Inhibition in Ewing Sarcoma Upregulates G_{D2} Expression for Targeting with Gene-Modified T Cells

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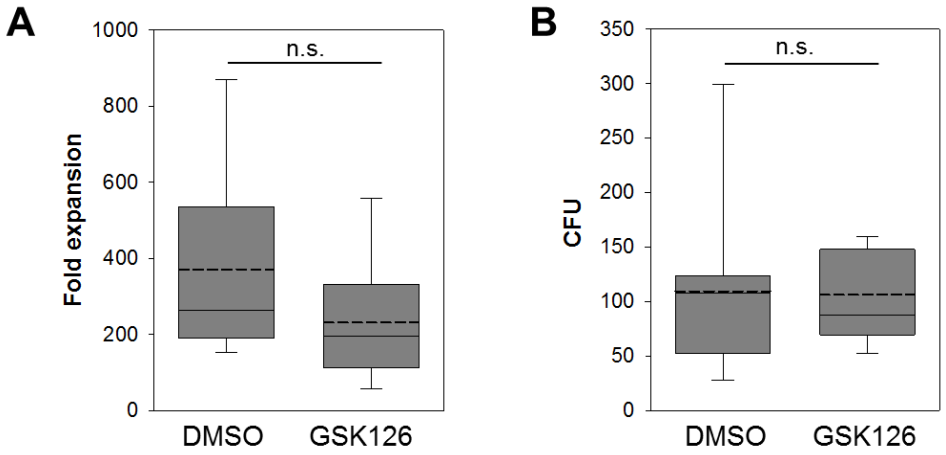
Supplemental Information

Supplemental Figure 1.



Supplemental Figure 2.

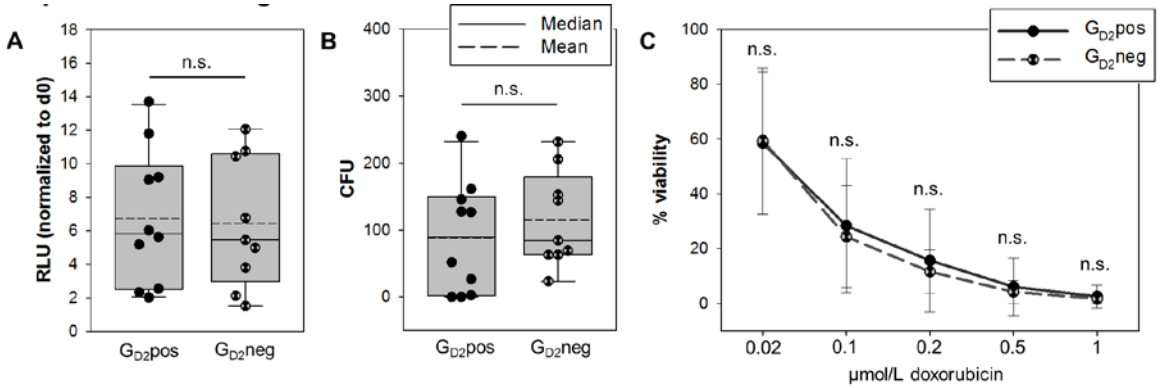


FIGURE LEGENDS

Supplemental Figure 1. *In vitro* expansion and colony formation of G_{D2}neg EwS cells cultured in the presence of GSK126. A. *In vitro* expansion rates of 9 G_{D2}neg EwS cell lines cultured in the presence of 4 µM GSK126 or equivalent volumes of DSMO (control) for 14 days determined by trypan blue exclusion and cell counting. B. Colony formation of tumor cells cultured in semisolid medium in the presence of 4 µM GSK126 or equivalent volumes of DSMO (control) for 14 days. Statistical analysis for both assays was done by t-test.

Supplemental Figure 2. Proliferation, colony formation and viability of tumor cells from G_{D2}pos and G_{D2}neg EwS cell lines. A. Proliferation of tumor cells from 10 G_{D2}pos and 9 G_{D2}neg EwS cell lines (defined as in Figure 1A) after 3 days of *in vitro* culture by luminometry. RLU, relative luminescence unit. Statistical analysis by t-test. B. Colony formation of tumor cells from 10 G_{D2}pos and 9 G_{D2}neg EwS cell lines in semisolid agar. Statistical analysis by t-test. C. Viabilities of tumor cells from 10 G_{D2}pos and 9 G_{D2}neg EwS cell lines following incubation with the indicated concentrations of doxorubicin by luminometry. Statistical analysis by Rank sum test for all concentrations.

Supplemental Table 1. Authentification of cell lines. The identity of the cell lines was confirmed by short tandem repeat (STR) profiling. *http://www.dsmz.de/fp/cgi-bin/str.html

Cell line	D3S1358	vWA	FGA	Amelogenin	TH01	TPOX	CSF1PO	D5S818	D13S317	D16S539	D7S820	Cell bank profile available?	
TC-71	15,17	17,18	24,26	x,y	9.30	8,9	10,11	10	11,12	11,14	10	Yes	100% Match
MS-EwS-15	15,17	17,18	20,22	x,y	6.00	8	10,11	11	14	12,13	8,11	No	Unique profile
MS-EwS-6	14	16,17	20,24	x,y	6.00	8	10,12	13	8,13	8,11	12,13	No	Unique profile
MS-EwS-1	15,18	16,18	18,22	x,y	9,9.3	11	10,11	11,12	10,11	11	9,11	No	Unique profile
VH-64	16,17	15,19	22,23	x	6	8	11,12	12,13	8,11	12	12	No	Unique profile
MS-EwS-34	15,18	16,18	19,23	x	6,8	8,10	12	11	9,11	12	10,12	No	Unique profile
MS-EwS-16	15,16	16,18	20,26	x,y	6,7	8,10	10,11	13	8,12	11	8,11	No	Unique profile
TC-32	15,16	15,18	23,24	x	6, 9.3	9, 11	11,13	12,13	10,12	13,14	8,11	No	Unique profile
A4573	16,17	18,19	24	x	7.80	8,10	11,13	11,12	8,10	12	11	No	Unique profile
Cado-ES-1	16,18	14,18	21,22	x	6.90	8,11	11,12	11,12	10,13	9,11	11,13	Yes	100% Match
SK-ES-1	16,18	14,17	20,21	x,y	6,9.3	8	11	12	8,9	11	10,11	Yes	100% Match
MS-EwS-4	17	14,15	25	x,y	9.30	8	12	13	11	11,12	10,11	No	Unique profile
RD-ES	15	17	21,25	x,y	7.00	9,11	11	11	11,12	9,11	10	Yes	100% Match
SK-N-MC	15	17,18	21,25	x	9.30	9,11	10	11	11	12	8	Yes	100% Match
5838	16	15,18	20,22	x,y	9.30	8	11	10	13	9,11	11	No	Unique profile
WE-68	15,18	16,18	19,23	x	6,8	8,10	12	11	9,11	12	10,12	No	Unique profile
TTC-466	17,18	15,17	24,25	x	7.00	8	10	10	10,12	11,12	8,10	No	Unique profile
A673	14	15,18	19,20	x	9.30	8	11,12	11,12	8,13	11	10,12	Yes	100% Match
RM-82	15,17	16	18	x,y	7,9.3	8	12	11	11,14	12	8,11	No	Unique profile
SupB15	15,16	15,17	19,20	x,y	6,9.3	8,9	11,12	12,13	8,14	11,12	10,11	Yes	100% Match

Supplemental Table 1. Continued.

Jurkat	15	18	20,21	x,y	6,9.3	8,10	11,12	9	8,12	11	8,12	Yes	100% Match
Fibroblasts	15,17	15,19	22,26	x	6.00	8,9	10	11,12	11,13	12,13	8,10	No	Unique profile
A204	14,17	15,17	21	x	8,9.3	8,9	10,13	12	11,12	11,12	8,10	Yes	100% Match
LCL	14,16	17,20	23,25	x	6,9	8	11,12	11	8,12	11,12	9,10	No	Unique profile