

Figure S1. Effect of CDH2 downregulation on the response of hypoxic HNSCC cells to radiation. LK0858, LK0863 and UT-SCC-14 cells transfected with either non-targeting siRNA or siRNA targeting CDH2 were exposed to hypoxia for 24 h prior to transfection and returned to hypoxic conditions after transfection. Expression of CDH2 was evaluated 48 h post-transfection using reverse transcription-quantitative PCR (LK0858 and LK0863) or western blotting (UT-SCC-14). In parallel experimental settings, LK0858, LK0863 and UT-SCC-14 cells were irradiated at 2, 4 or 6 Gy 24 h post-transfection with respective siRNAs, followed by re-exposure to hypoxic conditions (1% O₂). After 9 days, the cytotoxic/cytostatic effect on cell proliferation was determined by a crystal violet assay. Cell proliferation is presented as the percentage of the untreated controls, and the data are presented as the mean ± SD from three experiments performed in triplicate. *P<0.05. The data was analyzed using Student's t-test. CDH2, cadherin 2; siRNA, small interfering RNA.

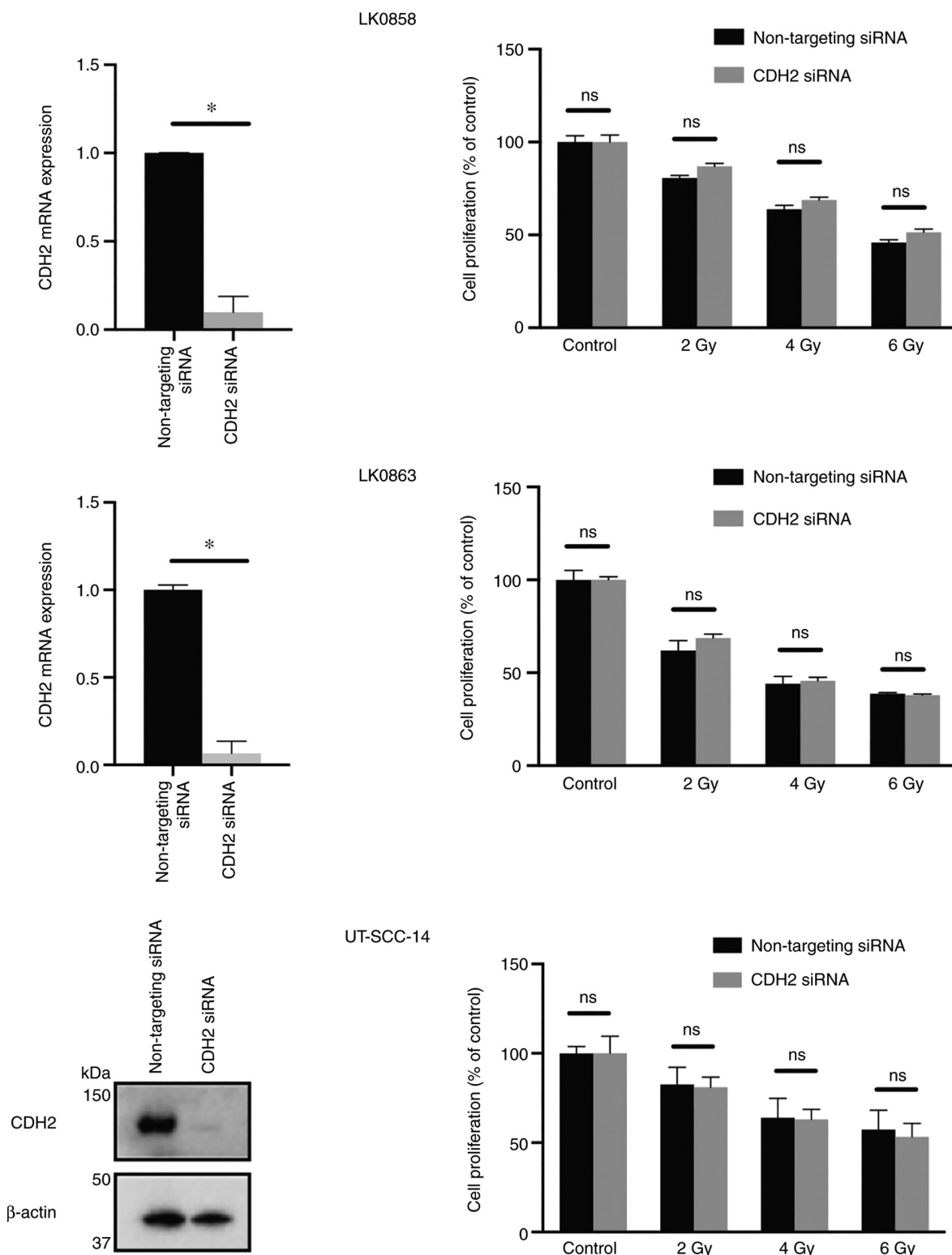


Figure S2. Ingenuity Pathway Analysis-predicted top regulator effector network. Upregulated and downregulated genes are shown in red and green, respectively. An asterisk indicates a gene that is represented in the dataset by >1 transcript.

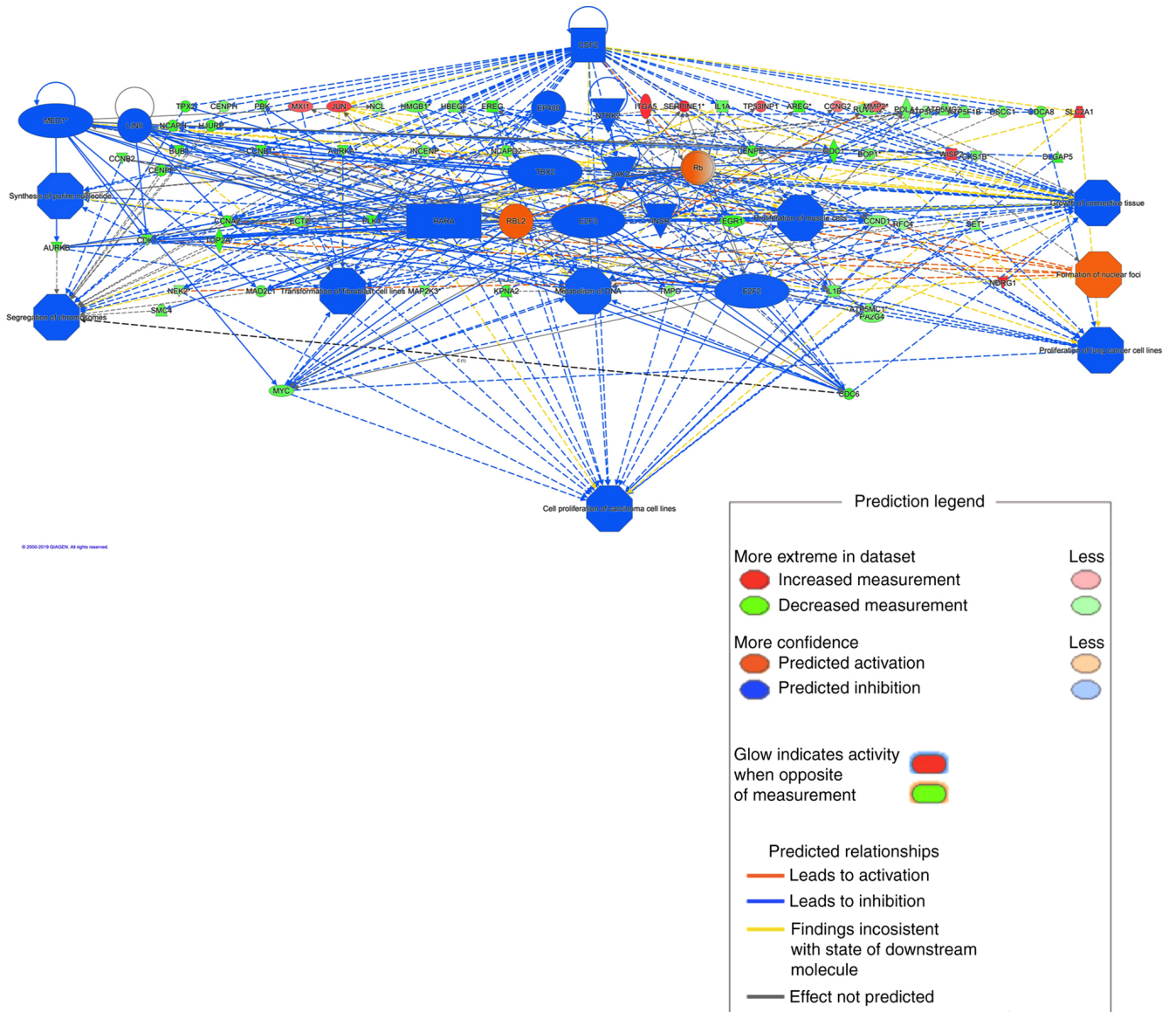


Table SI. List of siRNA target sequences used in the present study.

FlexiTube siRNA	Cat. no.	Target sequence (5'→3')
Human AREG_1	SI00299845	CAGAGTTGAACAGGTAGTTAA
Human AREG_5	SI03049683	ATGATTGACAGTAGTTTATCA
Human EREG_10	SI04199244	AACTGTATTTATTAACGCTTA
Human HIF1A_5	SI02664053	AGGAAGAACTATGAACATAAA
Human HIF1A_11	SI04262041	TCGGCGAAGTAAAGAATCTGA
Human SERPINE_1	SI00012628	TTGGAGGACCTTTAGGTCAAA
Human SERPINE_6	SI03039715	ACCGACATGTTTCAGACAGTTT
Human CA9_3	SI00023534	CTGGCTGCTGGTGACATCCTA
Human CA9_4	SI00023541	GAGGAGGATCTGCCAGTGAA
Human CDH2_6	SI02757335	CAGATCGATATATGCAGCAAA
Human CDH2_11	SI04434619	CAGGATCAGGTCTGATAGAGA
AllStars Negative Control	1027281	Proprietary

All siRNAs were ordered from Qiagen GmbH. siRNA, small interfering RNA.