Figure S1. IC₅₀ values were determined after 48-h treatment of SW480 cells with sulforaphane or sulforaphene. (A) Sulforaphane-treated. (B) Sulforaphene-treated. The x-axis represents the concentration of the compound after log conversion, where log $(25)=1.398 \mu \text{mol/l}$.

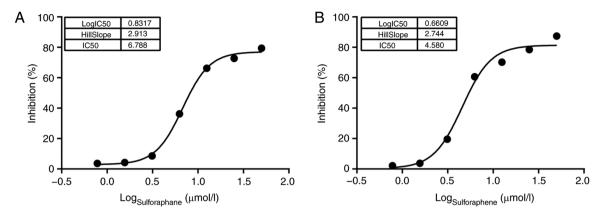


Figure S2. Pearson's correlation coefficient between samples. The blue-to-red scale represents Pearson correlation's coefficient.

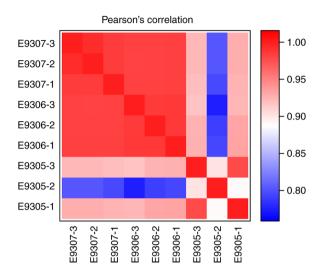


Figure S3. Principal component analysis results of sample signal strength between the three groups.

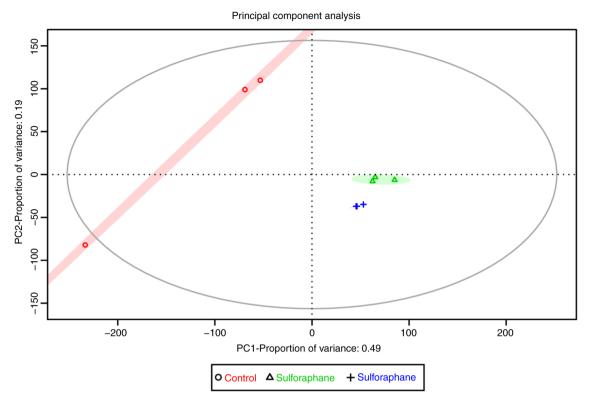


Figure S4. Pathways affected by sulforaphane and sulforaphene treatment. (A and B) p53 signaling pathway affected by (A) sulforaphane and (B) sulforaphene. (C and D) MAPK signaling pathway affected by (C) sulforaphane and (D) sulforaphene. (E and F) FOXO signaling pathway affected by (E) sulforaphane and (F) sulforaphene. (G and H) WNT signaling pathway affected by (G) sulforaphane and (H) sulforaphene. Red indicates that the gene is upregulated, whereas blue indicates that the gene is downregulated.

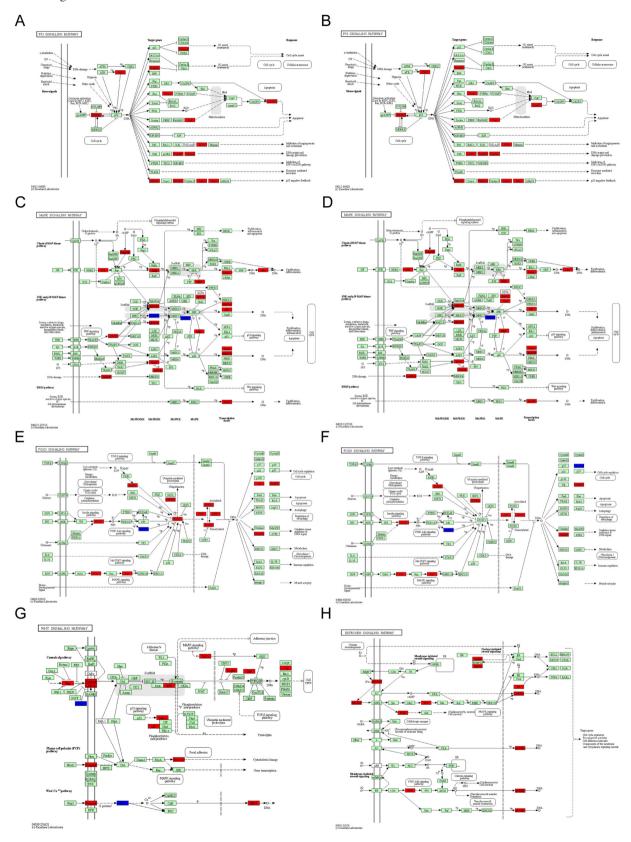


Table SI. Quality control results of RNA samples.

Sample name	Group	Concentration, $ng/\mu l$	Nanodrop 2000 parameters		Agilent 2100 parameters	
			A260/A280	RIN	28S/18S	Result
E9305-1	Control	1,982.1	2.02	9.8	2.0	Qualified
E9305-2	Control	1,921.2	1.81	10.0	2.4	Qualified
E9305-3	Control	1,920.9	1.96	9.9	2.1	Qualified
E9306-1	Sulforaphene	1,435.9	1.59	9.7	2.2	Qualified
E9306-2	Sulforaphene	1,444.0	1.71	9.7	2.0	Qualified
E9306-3	Sulforaphene	1,454.2	2.03	9.7	2.1	Qualified
E9307-1	Sulforaphane	1,545.8	2.16	9.2	1.7	Qualified
E9307-2	Sulforaphane	1,496.6	1.68	9.2	1.7	Qualified
E9307-3	Sulforaphane	1,446.4	2.05	9.0	1.6	Qualified

RIN, RNA integrity number.