

Supplementary Table S1. Dose-response analysis of Juglone, PiB, and Wnt3a in MRC-5 cells based on MTT assay.

Compound	Concentration Tested	Cell Viability (% of Control)	Selected Experimental Dose	Rationale for Selection
Juglone	5 μ M	91.4 \pm 2.1%		
	10 μ M	86.9 \pm 1.8%		
	20 μM	79.2 \pm 2.5%	20 μM	Effective inhibition with minimal cytotoxicity
	30 μ M	65.3 \pm 3.2%		
	40 μ M	49.7 \pm 3.8%		
PiB	5 μ M	95.6 \pm 1.5%		
	10 μM	83.7 \pm 2.0%	10 μM	Optimal balance of activity and cell survival
	20 μ M	66.5 \pm 2.9%		
	30 μ M	51.1 \pm 3.4%		
Wnt3a	25 ng/mL	98.2 \pm 1.2%		
	50 ng/mL	94.5 \pm 1.6%	50 ng/mL	Strong β -catenin activation with no cytotoxicity
	100 ng/mL	91.3 \pm 2.3%		

Note: Cell viability was measured by MTT assay after 24 h exposure to each compound. Values are presented as mean \pm SD from three independent experiments. Selected doses were those producing $\geq 80\%$ viability while showing strong pathway modulation in functional assays.