

Supplementary Material

Baicalein induces apoptosis of pancreatic cancer cells by regulating the expression of miR-139-3p and miR-196b-5p

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Supplementary Figures

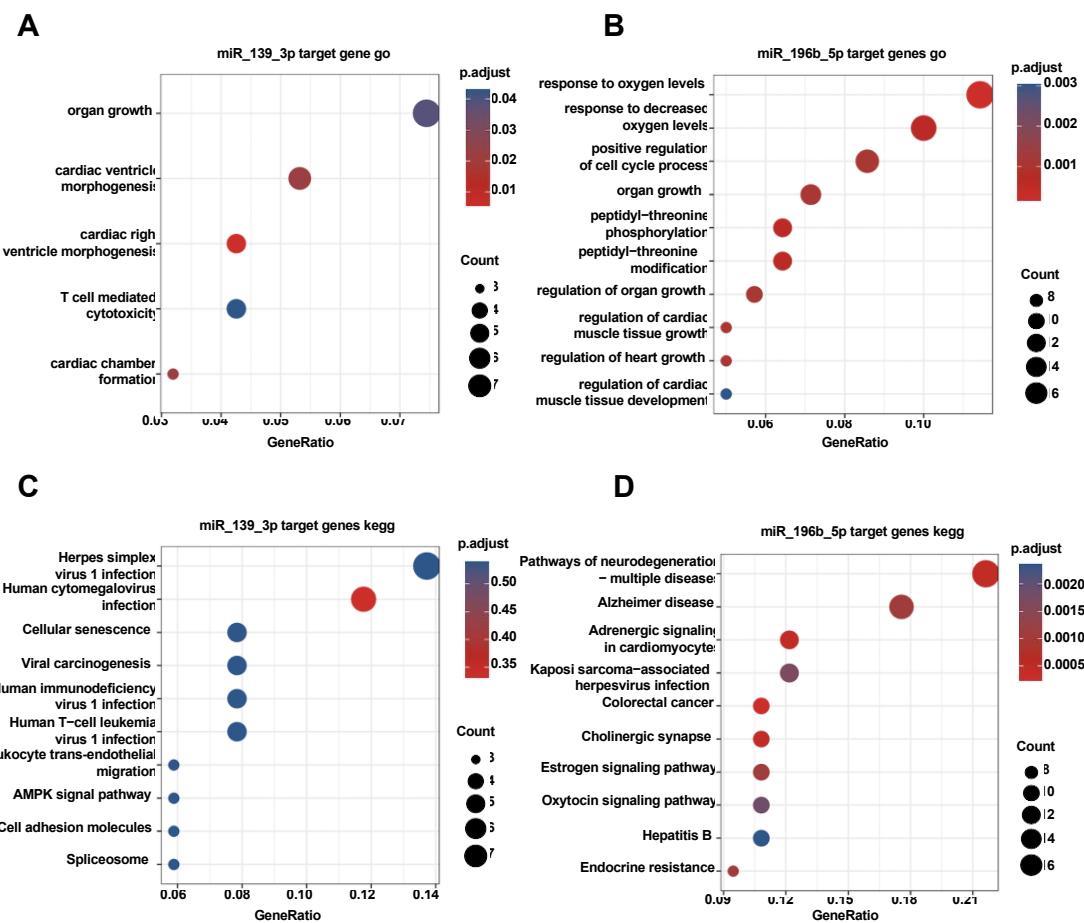


Figure S1. (A-B) GO analysis results of miR-139-3p (A) and miR-196b-5p (B). (C-D) KEGG analysis results of miR-139-3p (C) and miR-196b-5p (D).

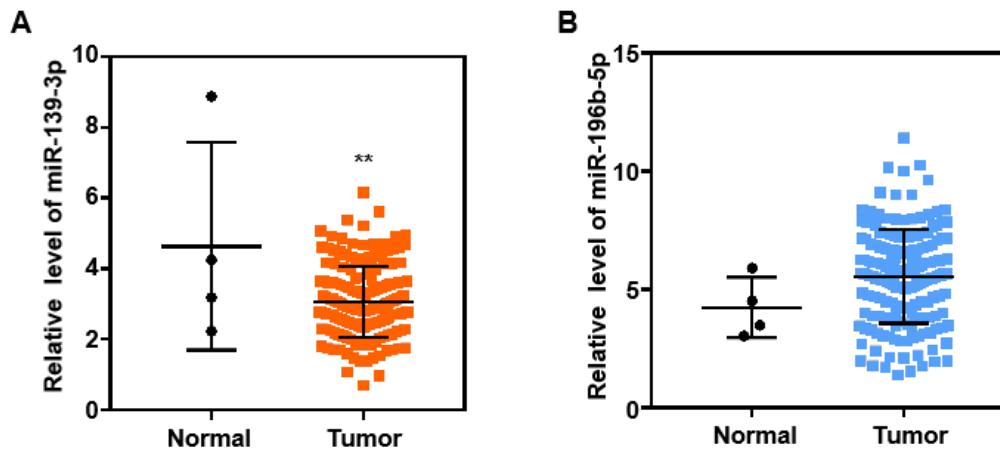


Figure S2. (A) The expression levels of miR-139-3p between normal tissues (n=4) and pancreatic cancer tissues (n=178). (B) The expression levels of miR-196b-5p between normal tissues (n=4) and pancreatic cancer tissues (n=178).

Table S1

The alteration of miRNAs in Panc-1 cells treated with 100 μ M baicalein. The expression level of 20 miRNAs was up-regulated and 39 miRNAs was down-regulated. Fold Change > 1.5 & baseMean > 10.

miRNA Name	Accession ID	FoldChange	Adjust P-values	Regulation
hsa-miR-139-3p	MIMAT0004552	7.282545	2.15736E-06	Up
hsa-miR-139-5p	MIMAT0000250	3.082104	8.59986E-14	Up
hsa-miR-486-3p	MIMAT0004762	2.924038	0.000127932	Up
hsa-miR-3909	MIMAT0018183	2.331688	7.00127E-05	Up
hsa-miR-12135	MIMAT0049031	2.275663	6.7525E-08	Up
hsa-miR-212-5p	MIMAT0022695	2.090001	0.003654684	Up
hsa-miR-4454	MIMAT0018976	2.049308	0.00631957	Up

hsa-miR-22-5p	MIMAT0004495	1.964844	8.32658E-14	Up
hsa-miR-132-5p	MIMAT0004594	1.962723	5.18452E-08	Up
hsa-miR-3065-5p	MIMAT0015066	1.944731	0.037362044	Up
hsa-miR-1248	MIMAT0005900	1.910229	0.030070752	Up
hsa-miR-361-3p	MIMAT0004682	1.819638	1.44298E-23	Up
hsa-miR-29b-3p	MIMAT0000100	1.760884	2.68465E-08	Up
hsa-miR-22-3p	MIMAT0000077	1.662964	2.10239E-29	Up
hsa-miR-182-5p	MIMAT0000259	1.647463	3.05082E-18	Up
hsa-miR-362-5p	MIMAT0000705	1.626103	6.4133E-07	Up
hsa-miR-877-5p	MIMAT0004949	1.595598	0.034385343	Up
hsa-miR-342-3p	MIMAT0000753	1.589498	0.011979265	Up
hsa-miR-125b-5p	MIMAT0000423	1.56387	6.2098E-21	Up
hsa-miR-30c-5p	MIMAT0000244	1.55894	6.48165E-23	Up
hsa-miR-99b-3p	MIMAT0004678	0.657296	5.74559E-10	Down
hsa-miR-503-5p	MIMAT0002874	0.638502	5.75444E-14	Down
hsa-miR-193b-5p	MIMAT0004767	0.637751	0.043222108	Down
hsa-miR-193b-3p	MIMAT0002819	0.636652	0.000179899	Down
hsa-miR-210-3p	MIMAT0000267	0.634739	7.987E-07	Down
hsa-miR-425-3p	MIMAT0001343	0.626455	0.002434963	Down
hsa-miR-1-3p	MIMAT0000416	0.620036	1.90908E-05	Down

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hsa-miR-27a-5p	MIMAT0004501	0.61616	4.45364E-16	Down
hsa-miR-16-2-3p	MIMAT0004518	0.612021	2.25389E-10	Down
hsa-miR-7974	MIMAT0031177	0.607032	4.80325E-08	Down
hsa-miR-128-1-5p	MIMAT0026477	0.57635	0.001414609	Down
hsa-miR-379-3p	MIMAT0004690	0.563477	4.68781E-06	Down
hsa-miR-218-5p	MIMAT0000275	0.538983	2.52908E-13	Down
hsa-miR-143-3p	MIMAT0000435	0.535061	0.027188665	Down
hsa-let-7b-3p	MIMAT0004482	0.533739	6.4133E-07	Down
hsa-miR-345-5p	MIMAT0000772	0.52958	3.06241E-07	Down
hsa-miR-301a-5p	MIMAT0022696	0.52279	1.91688E-07	Down
hsa-miR-410-3p	MIMAT0002171	0.516407	1.0047E-05	Down
hsa-miR-23b-5p	MIMAT0004587	0.507218	3.91835E-06	Down
hsa-miR-21-3p	MIMAT0004494	0.50562	0.000487493	Down
hsa-miR-222-5p	MIMAT0004569	0.494626	0.00981005	Down
hsa-miR-1303	MIMAT0005891	0.48999	8.57718E-16	Down
hsa-miR-708-5p	MIMAT0004926	0.461778	6.95494E-05	Down
hsa-miR-154-3p	MIMAT0000453	0.46004	0.011845714	Down
hsa-miR-338-5p	MIMAT0004701	0.459702	0.043222108	Down
hsa-miR-504-5p	MIMAT0002875	0.4389	0.035883542	Down
hsa-miR-615-5p	MIMAT0004804	0.416224	5.99476E-06	Down

hsa-miR-365a-5p	MIMAT0009199	0.412724	1.83264E-06	Down
hsa-miR-146a-3p	MIMAT0004608	0.381238	0.001971732	Down
hsa-miR-27b-5p	MIMAT0004588	0.361478	1.00537E-22	Down
hsa-miR-33b-3p	MIMAT0004811	0.350795	0.000467711	Down
hsa-miR-26a-1-3p	MIMAT0004499	0.335899	0.045190379	Down
hsa-miR-224-5p	MIMAT0000281	0.327697	5.96816E-07	Down
hsa-miR-503-3p	MIMAT0022925	0.251327	0.006430936	Down
hsa-miR-4521	MIMAT0019058	0.229694	0.000570054	Down
hsa-miR-296-3p	MIMAT0004679	0.213336	2.89841E-07	Down
hsa-miR-1269b	MIMAT0019059	0.174222	0.012201299	Down
hsa-miR-210-5p	MIMAT0026475	0.142066	0.000260448	Down
hsa-miR-196b-5p	MIMAT0001080	0.124141	1.71912E-31	Down

TABLE S2 | The sequence of qPCR primers used in this paper.

Primer name	Sequence (5'-3')
GAPDH-F	AGCCACATCGCTCAGACAC
GAPDH-R	GCCCAATACGACCAAATCC
U6-F	CTCGCTTCGGCAGCACA
U6-R	AACGCTTCACGAATTGCGT
Caspase-3-F	TGCCTGTAACTTGAGAGTAGATGG
Caspase-3-R	CTTCACTTCTTACTTGGCGATGG
p21-F	TGTCTTGTACCCTTGTGCCTC
p21-R	TGGTAGAAATCTGTCATGCTGGT
CCND1-F	GAGGAGCTGCTGCAAATGGA
CCND1-R	GGAGGGCGGATTGGAAATGA
miR-139-3p-F	TCGGCAGGTGGAGACGCCGCCCCGT
miR-139-3p-R	GCAGGGTCCGAGGTATT
miR-139-5p-F	TCTACAGTGCACGTCTCCAGT
miR-139-5p-R	TGGAGACACGTGCACTGTAGATT
miR-486-3p-F	GCAGGGCAGCTCAGTA
miR-486-3p-R	CGGGGCAGCTCAGTACAGGAT
miR-196-5p-F	GCGCGTAGGTAGTTCCCTGTT
miR-196-5p-R	AGTGCAGGGTCCGAGGTATT
miR-296-3p-F	GCCGAGGAGGGTTGGGTGGA
miR-296-3p-R	CTCAACTGGTGTGCGA
miR-210-5p-F	CCTGCAATATTGCATGTCG
miR-210-5p-R	GTCCCTATTGGCGTTACTATGG
NOB1-F	ATCTGCCCTACAAGCCTAAC
NOB1-R	TCCTCCTCCTCCTCCTCAC
ING5-F	GCACAAAGGAGGGTCTGA

ING5-R	TGGGTTTCGTGGTAAGGT
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