

Supplemental Information

Repression of LKB1 by *miR-17~92* Sensitizes

MYC-Dependent Lymphoma to Biguanide Treatment

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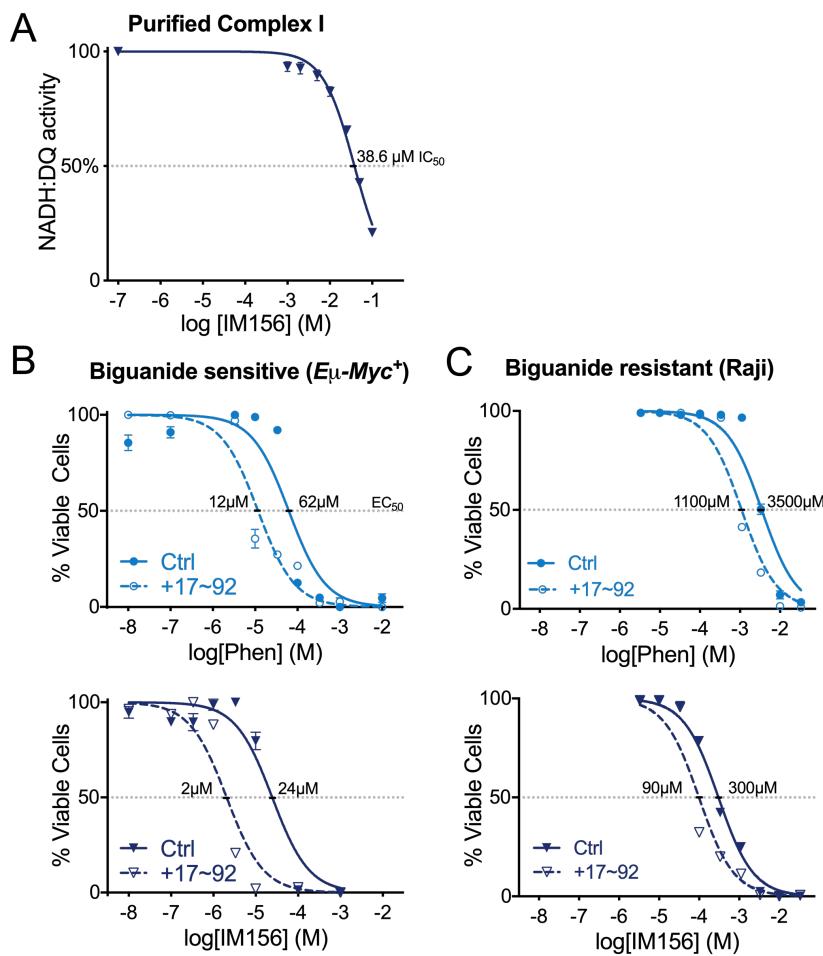


Fig. S1, related to Fig. 2. miR-17~92 sensitizes lymphoma cells to apoptosis by biguanides

(A) NADH:decylubiquinone (DQ) oxidoreduction by purified complex I (isolated from bovine mitochondria) was measured in the presence of the indicated concentrations of IM156. Data represent mean ± SEM for technical replicates (n = 3 per concentration).

(B-C) Viability of biguanide sensitive $E\mu$ -Myc⁺ lymphoma cells (A) or biguanide-resistant Raji cells (B) expressing control (Ctrl, closed circle/solid) or miR-17~92 (+17~92, open circle/dashed) vectors following 48 h treatment with indicated doses of phenformin (top) or IM156 (bottom). EC₅₀ for each compound is indicated. Data represent mean ± SEM for biological replicates (n = 3 per drug per concentration).

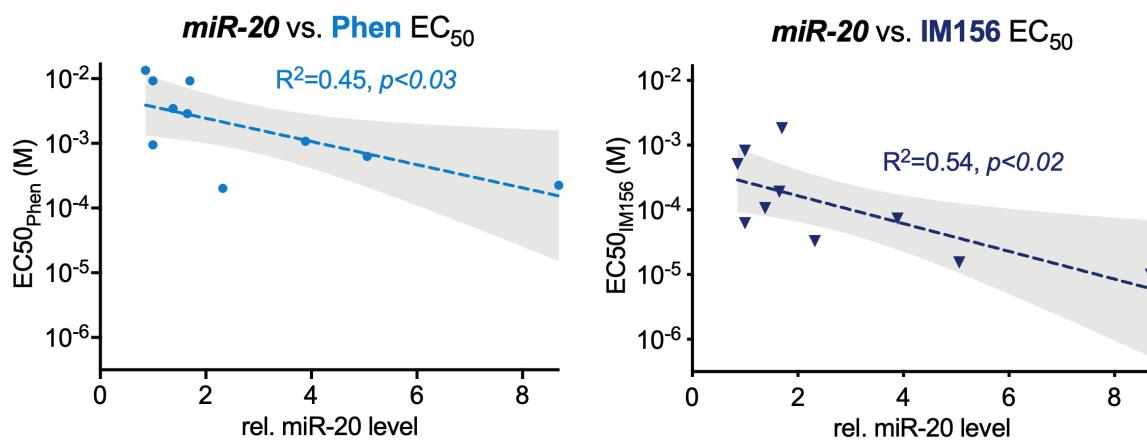


Fig. S2, related to Fig. 6. miR-17/20 expression correlates with biguanide sensitivity in human lymphoma cells. EC₅₀ for phenformin (Phen, left) and IM156 (right) correlated to the relative levels of mature miR-20 transcript for ten human lymphoma cell lines (n = 3 per sample). Linear regression (dotted line) is shown for both drugs with shaded 95% confidence interval.

Table S1, related to Fig. 6. EC₅₀ and miR17/20 expression in human lymphoma cell lines

	Relative expression			EC ₅₀	
	pri-miR-17	miR-17	miR-20	Phen	IM156
SU-DHL-4	1	1	1	0.009283	0.0008229
OCI-Ly-7	8.49	1.47	2.32	0.0002009	0.00003293
Jeko-1	6.10	1.63	3.89	0.001075	0.00007331
Rec-1	11.08	2.04	5.06	0.0006291	0.00001547
Karpas 1718	12.69	4.21	8.69	0.0002254	0.000009992
OCI-Ly-1	1.07	1.05	1.38	0.003448	0.0001068
OCI-Ly-2	1.58	1.17	1.65	0.002892	0.00019
OCI-Ly-3	1.29	1.7	1	0.0009506	0.00006248
OCI-Ly-8	1.81	1.11	1.7	0.009283	0.001828
OCI-Ly-18	0.43	0.7	0.86	0.01349	0.0005098