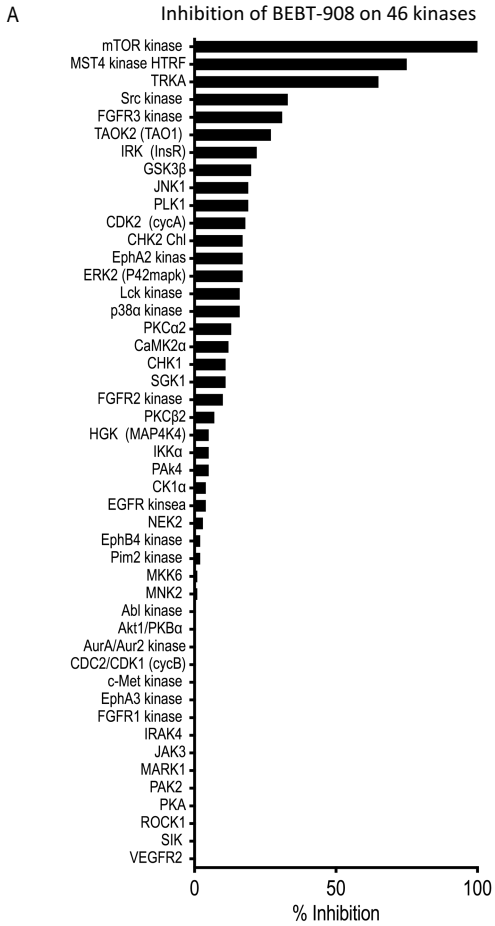
A

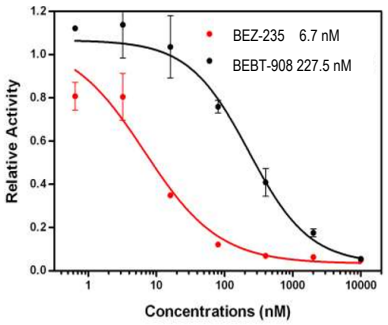


C

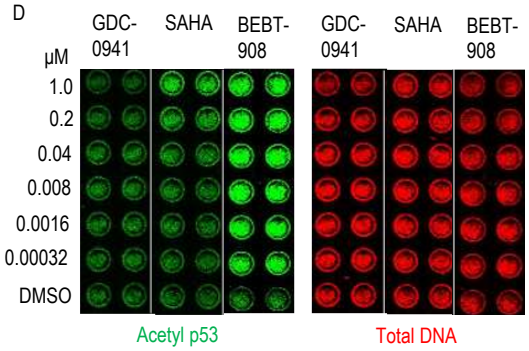
PIK3CA and P53 status in cancer cell lines			
		PIK3CA	P53
Hematologic			
DLBCL	Daudi	WT	G266E/+
DLBCL	TMD-8	WT	WT
DLBCL	Ramos	WT	I254D/I254D
CML	K562	WT	Q136fsTer13/Q136fsTer13
AML	THP-1	WT	R174fsTer3/+
AML	U937	WT	V173WfsTer59/V173WfsTer59
Solid			
Lung cancer	H2122	WT	Q16L/+, C176F/+
	Calu-6	WT	R196Ter/R196Ter
	H460	E545K/+	WT
	PC-9	WT	R248Q/R248Q
	H1975	G118D/+	R273H/R273H
	H358	WT	P53-null
Colon cancer	HCT116	H1047R/+	WT
	Colo205	WT	Y103fsTer37/Y103fsTer37
	SW620	WT	R237H/+, P309S/+
	LOVO	WT	WT
	SW480	WT	R237H/+, P309S/+
Mouse colon cancer	MC38	WT	G242V/+

Abbreviations: DLBCL, diffuse large B-cell lymphoma; CML, chronic myelogenous leukemia; AML, acute myelogenous leukemia; WT, wild type.

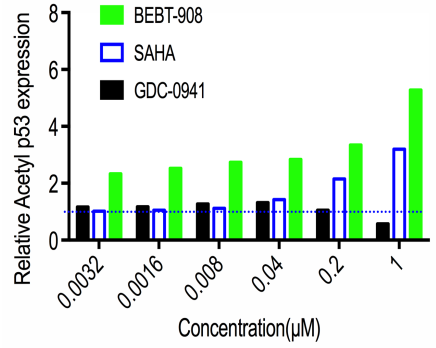
B



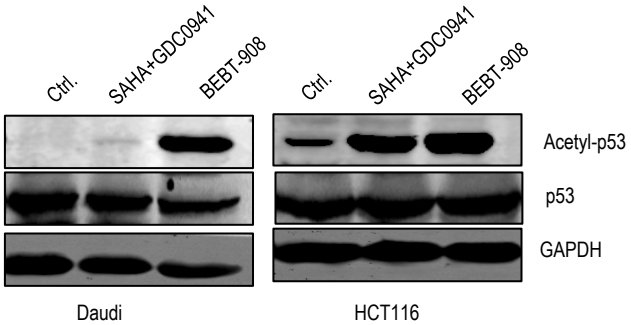
D



E



F



Supplementary Fig. S2. Off-target kinase and on-target kinase activities of BEBT-908.

(A) Off-target kinase activity of BEBT-908 at dose of 10 μM on 46 kinases profiling.

(B) Compared with dual PI3K/mTOR inhibitor BEZ-235, BEBT-908 weakly inhibits mTOR enzyme activity.

(C) The mutation status of PIK3CA and P53 in tested cancer cell lines from a public dataset (Expasy Cellosaurus, https://web.expasy.org/cgi-bin/cellosaurus).

(D) Hyperacetylation p53 (Acetyl p53) in H460 (wild type p53) cells treated at indicated doses of PI3K inhibitor (GDC-0941), HDAC inhibitor (SAHA) or BEBT-908 for 16 h. Total DNA stained as loading control.

(E) Quantitative data of Figure S1D.

(F) Hyperacetylation p53 (Acetyl p53) in Daudi (mutant p53), HCT116 (wild type p53) cells treated at IC_{50} doses of PI3K inhibitor (GDC-0941), HDAC inhibitor (SAHA) or BEBT-908 for 6 h. GAPDH as loading control.