

## Supplemental Data

# Isocorydine Targets the Drug-Resistant Cellular Side Population through PDCD4-Related Apoptosis in Hepatocellular Carcinoma

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**Supplementary Table S1.** Antibodies used in this study

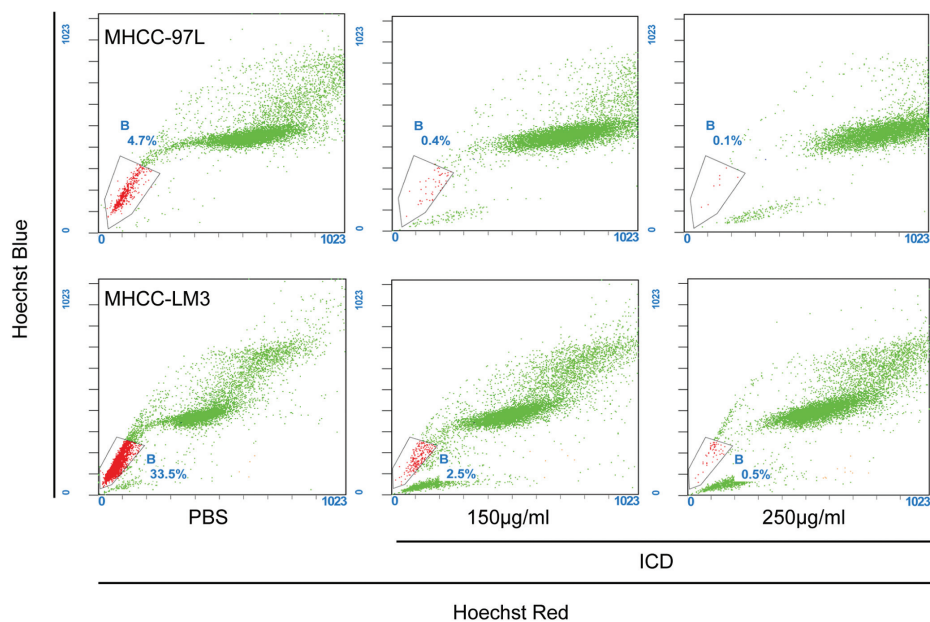
Antibody	Clone, source	Dilution	Company
ABCG2	BXP-21, mouse mAb IgG <sub>2a</sub>	1:200 for WB and IF	Santa Cruz (Santa Cruz, CA)
Caspase 12	rabbit polyclonal	1:1000 for WB	Abcam (Cambridge, UK)
Cleaved caspase 8(Asp 398)	18C8, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Caspase 8	D35G2, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Cleaved caspase 9(Asp 315)	rabbit mAb	1:200 for WB	Cell Signaling (Danvers, MA)
Caspase 9	rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Bcl2	50E3, rabbit mAb	1:200 for WB	Cell Signaling (Danvers, MA)
Bcl-xl	54H6, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Mcl-1	D35A5, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Bad	D249A, rabbit mAb	1:200 for WB	Cell Signaling (Danvers, MA)
Phosphor-Bad (Ser 112)	40A9, rabbit mAb	1:500 for WB	Cell Signaling (Danvers, MA)
Bax	2D2, mouse mAb IgG1	1:200 for WB	Thermo Scientific
Bik	rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Bim	C34C5, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
Bak	D2D3, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
puma	rabbit, mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
PDCD4	D29C6, rabbit mAb	1:1000 for WB	Cell Signaling (Danvers, MA)
β -actin	AC-15, mouse mAb	1:30000 for WB	Sigma (St. Louis, MO)
Secondary antibody	Alexa Fluor 488 goat anti-mouse	1:200 for IF	Invitrogen (Molecular Probes)
Secondary antibody	HRP conjugated goat anti mouse IgG <sub>2a</sub>	1:3000 for WB	Sigma (St. Louis, MO)
Secondary antibody	HRP conjugated goat anti mouse IgG <sub>1</sub>	1:3000 for WB	Sigma (St. Louis, MO)
Secondary antibody	HRP conjugated goat anti rabbit IgG	1:2000-1:5000 for WB	Cell Signaling (Danvers, MA)

IHC: Immunohistochemistry

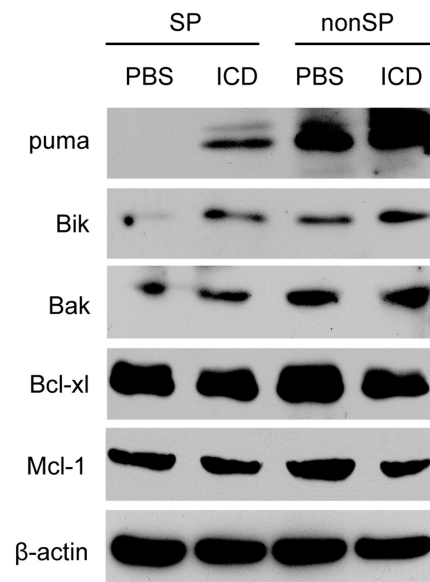
IF: Immunofluorescence staining

WB: Western blotting

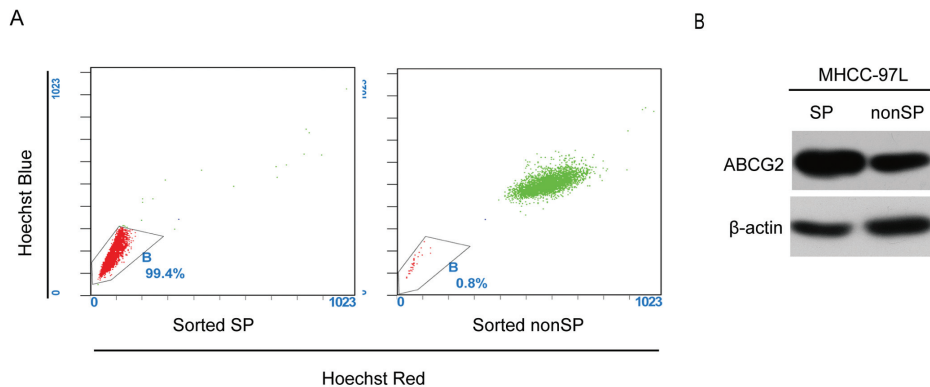
ISOCORYDINE TARGETS HCC SIDE POPULATION



**Supplementary Figure S1.** Alteration of the SP fraction in HCC cell lines after treatment with ICD for 48 h. Representative flow cytometry histograms of SP cells in the MHCC-97L and MHCC-LM3 lines after treatment with 150 µg/ml or 250 µg/ml ICD for 48 h.



**Supplementary Figure S3.** The expression of apoptosis proteins in MHCC-97L-SP and non-SP cells treated with ICD. Western blotting of pro-apoptosis and anti-apoptosis proteins in SP and non-SP cells from the MHCC-97L line revealed altered expression after treatment with 150 µg/ml ICD for 24 h.



**Supplementary Figure S2.** Purity of SP sorting in MHCC-97L cells. (A) Cytometry plots of sorted MHCC-97L-SP and non-SP cells. (B) Western blotting of ABCG2 expression in sorted MHCC-97L and non-SP cells.