

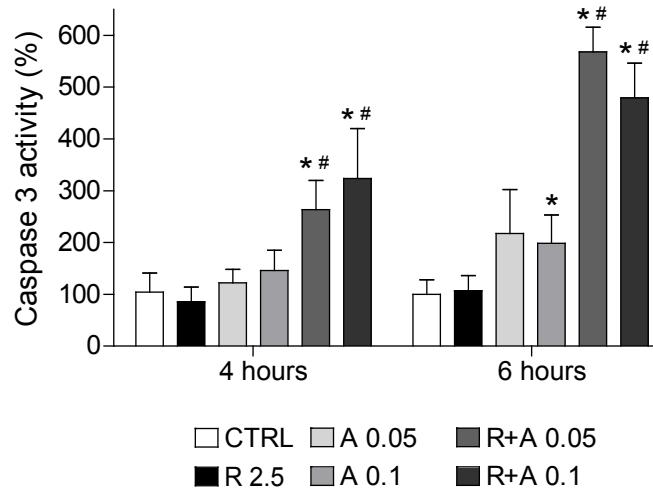
# Supplementary materials: Regorafenib alteration of the BCL-xL/MCL-1 ratio provides a therapeutic opportunity for BH3-mimetics in hepatocellular carcinoma models

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**Table S1.** Patient's data.

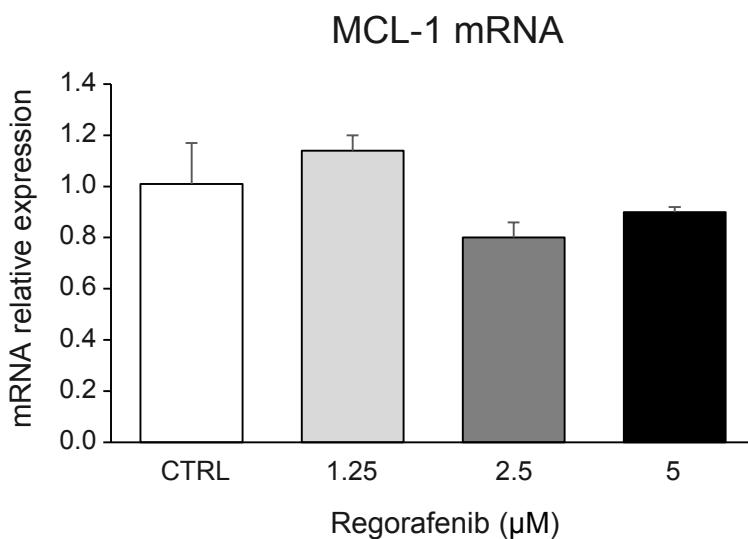
GENDER	AGE	Underlying liver disease	ETHIOLOGY	Virus hepatitis	AFP (ngr/mL)	TUMOR SIZE (cm)	Tumor	Vascular Invasion
M	67	cirrhosis	alcohol	NO		4,5	single	NA
M	54	cirrhosis	VHC+VHB+alcohol	VHC+VHB	15	1,3	single	NA
M	50	cirrhosis	VHC+alcohol	VHC	19	1,4	single	NA
M	61	chronic hepatitis	VHC	VHC	20	1,8	single	Yes
M	33	chronic hepatitis	VHB	VHB	4	1,1	single	No
F	61	cirrhosis	VHC	VHC	11	2,1	single	No
M	56	cirrhosis	VHC	VHC	2	5,2 (principal)	multinodular	No
M	68	cirrhosis	alcohol	No	1515	5	single	Yes, microvascular
M	61	cirrhosis	alcohol	No	2	3,5	single+1 satelite	No
M	47	cirrhosis	VHC	VHC	6	2,5	single	No
M	75	cirrhosis	VHC	VHC	23	1,1 ( principal)	binodular	No
F	69	cirrhosis	VHC	VHC	7	1,2	single	Yes, microvascular
M	78	cirrhosis	VHC	VHC		4,5	single	No
M	73	cirrhosis	VHC	VHC	2	2,1	single	No
M	67	cirrhosis	VHC	VHC	22	2,1	single	No
M	63	cirrhosis	VHC	VHC	2	2,2	single	No
M	63	chronic hepatitis	VHC	VHC	9	6	single	No
M	48	cirrhosis	VHC	VHC	7	7,5	single	Yes, peritumoral
M	64	cirrhosis	alcohol	NO	6	4,5	single	No
M	68	healthy liver	NA	NO	NA	NA	NA	NA
F	70	healthy liver	NA	NO	NA	NA	NA	NA
F	47	healthy liver	NA	NO	NA	NA	NA	NA
F	50	healthy liver	NA	NO	NA	NA	NA	NA
F	55	healthy liver	NA	NO	NA	NA	NA	NA
M	36	healthy liver	NA	NO	NA	NA	NA	NA
M	36	healthy liver	NA	NO	NA	NA	NA	NA
M	55	healthy liver	NA	NO	NA	NA	NA	NA
M	37	healthy liver	NA	NO	NA	NA	NA	NA
F	73	healthy liver	NA	NO	NA	NA	NA	NA

## Supplemental Figure 1



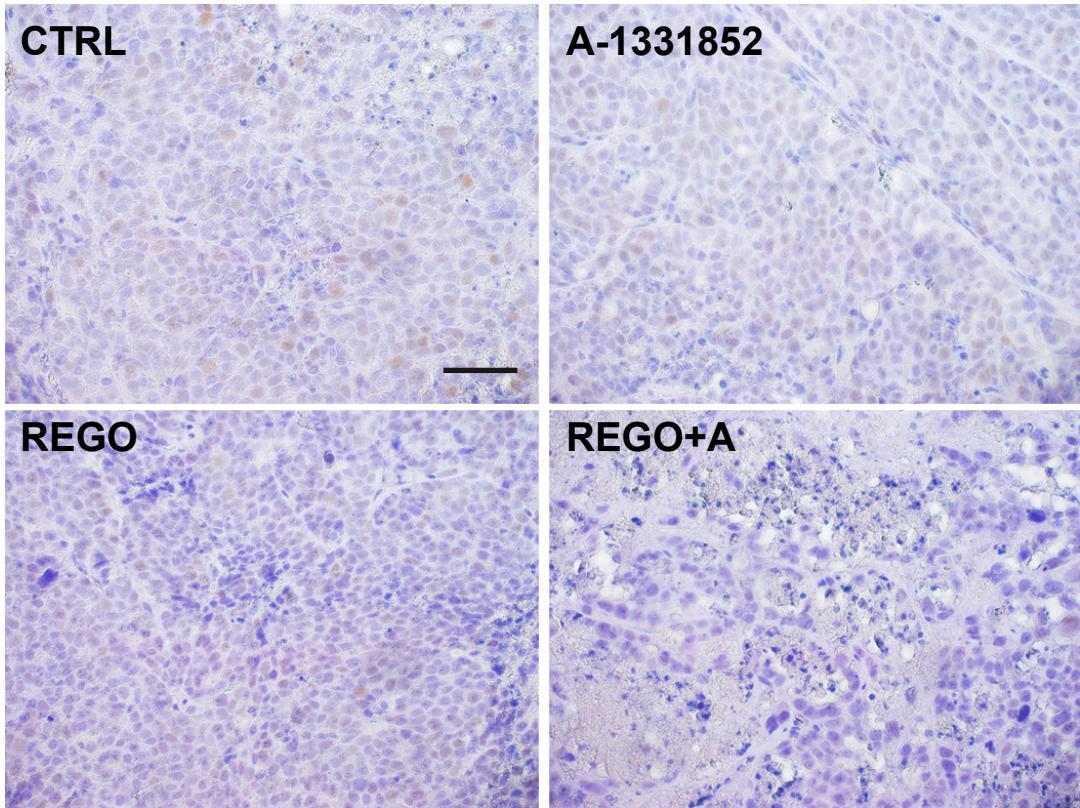
HepG2 cells were exposed to regorafenib (R, 2.5  $\mu$ M) with or without A-1331852 (A, 0.1-0.05  $\mu$ M) and caspase-3 activity was determined fluorimetrically at four and six hours. \*P< 0.05 vs. control cells, #P< 0.05 vs. regorafenib-treated cells. (n=3)

## Supplemental Figure 2



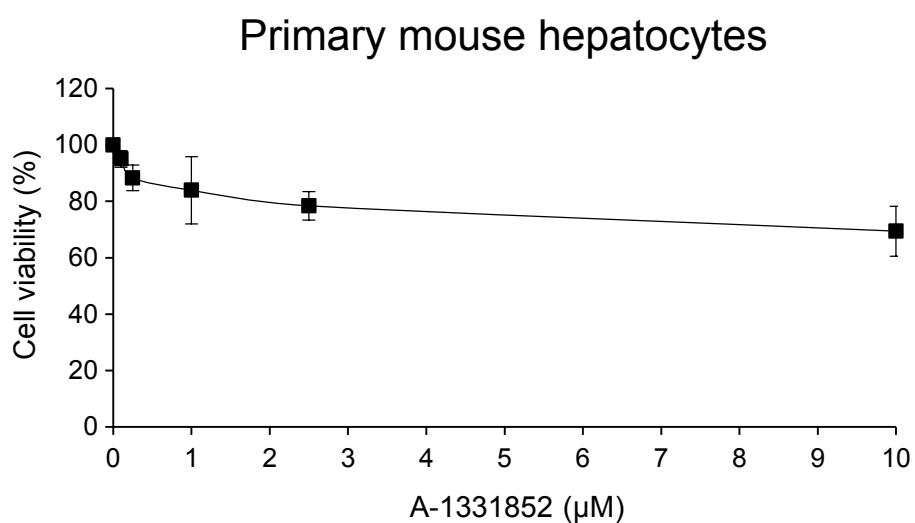
HepG2 cells were exposed to regorafenib (R, 1-5  $\mu$ M) for 16 h and mRNA levels of MCL-1 were determined by qPCR. (n=2)

## Supplemental Figure 3



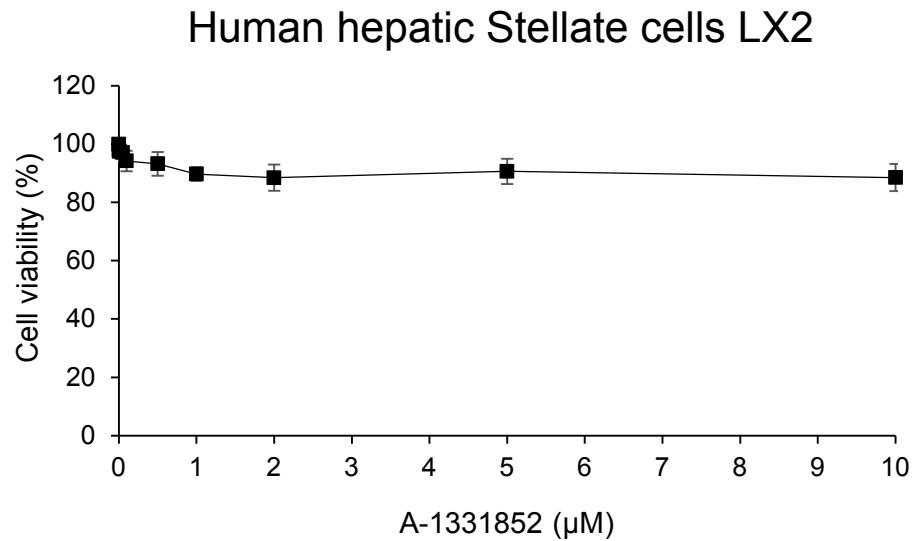
Representative images of Ki-67 expression in tumor samples from BCLC9 PDXs (scale bar, 50  $\mu$ m).

## Supplemental Figure 4



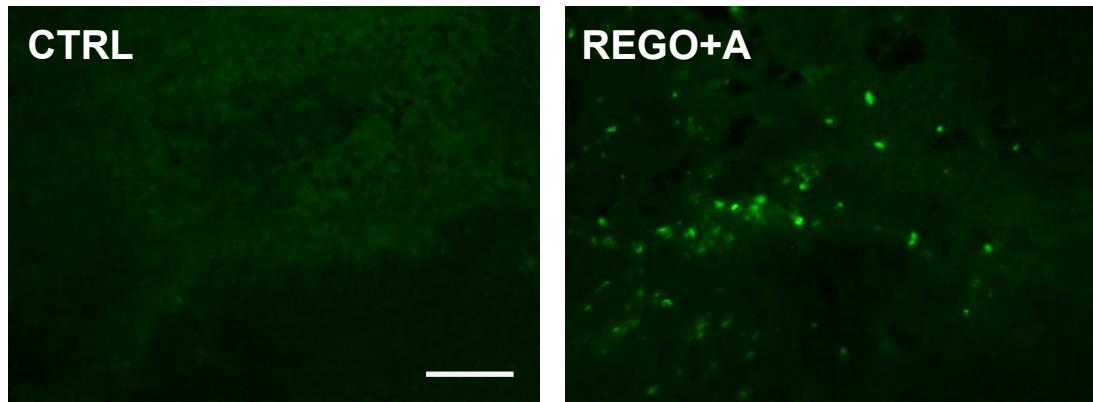
Primary mouse hepatocytes cultured on collagen plates were exposed to A-1331852 at different concentrations (up to 10  $\mu$ M) and MTT assays performed 16 h. (n=4)

## Supplemental Figure 5



Human hepatic Stellate cells LX2 were exposed to A-1331852 at different concentrations (up to 10  $\mu\text{M}$ ) and MTT assays performed 16 h. (n=4)

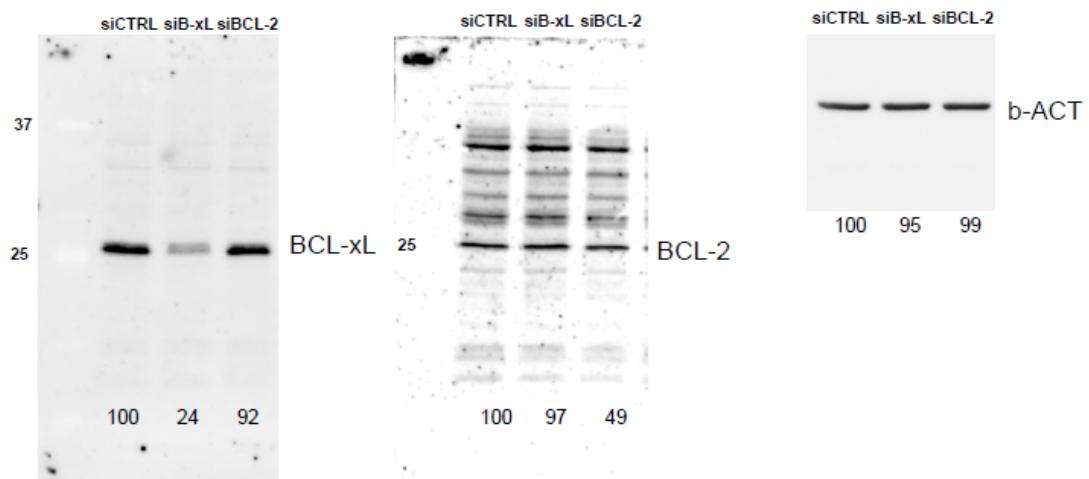
## Supplemental Figure 6



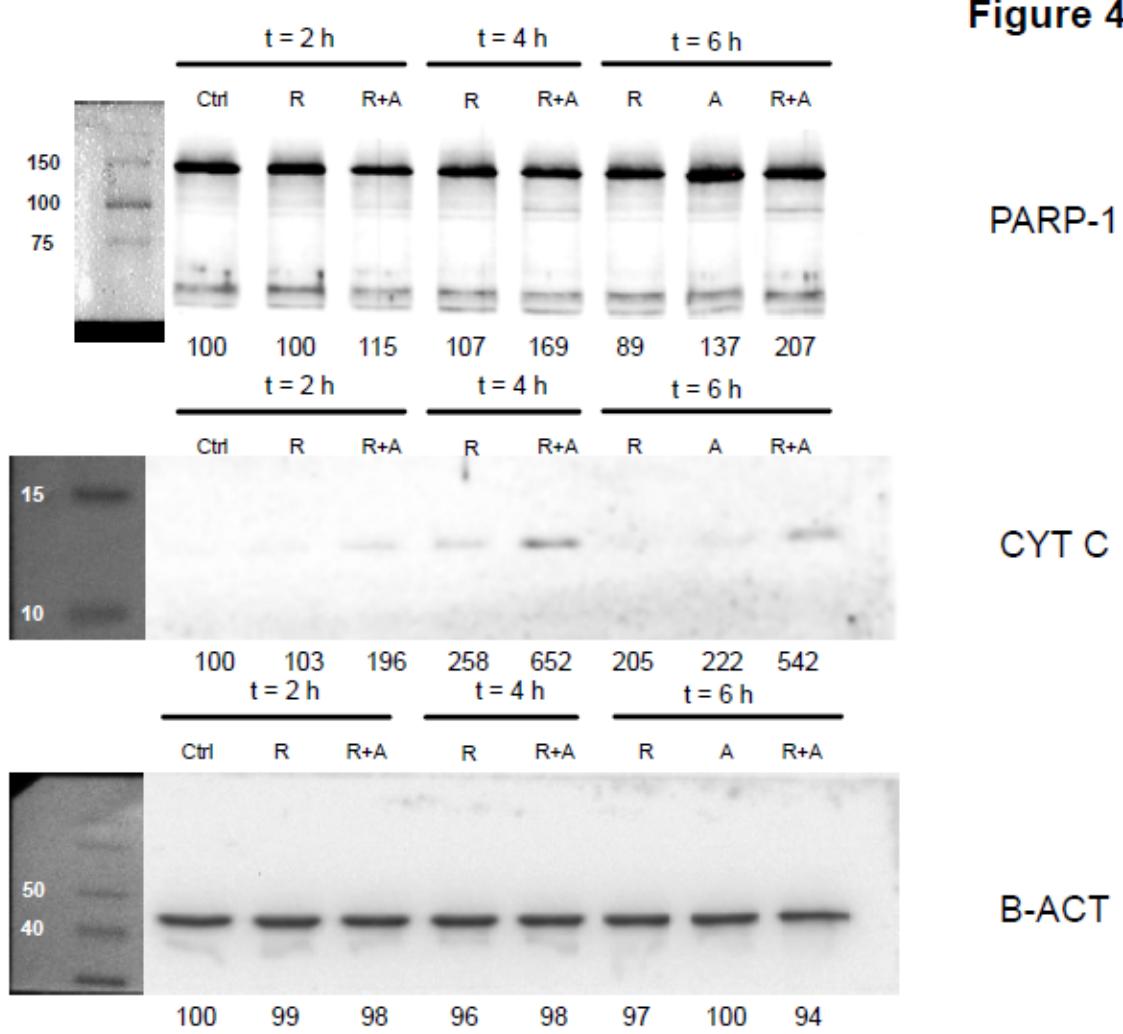
Representative images of TUNEL staining in tumor samples from R HEPG2 CDXs (scale bar, 100  $\mu\text{m}$ ).

The whole western blot

**Figure 2F**

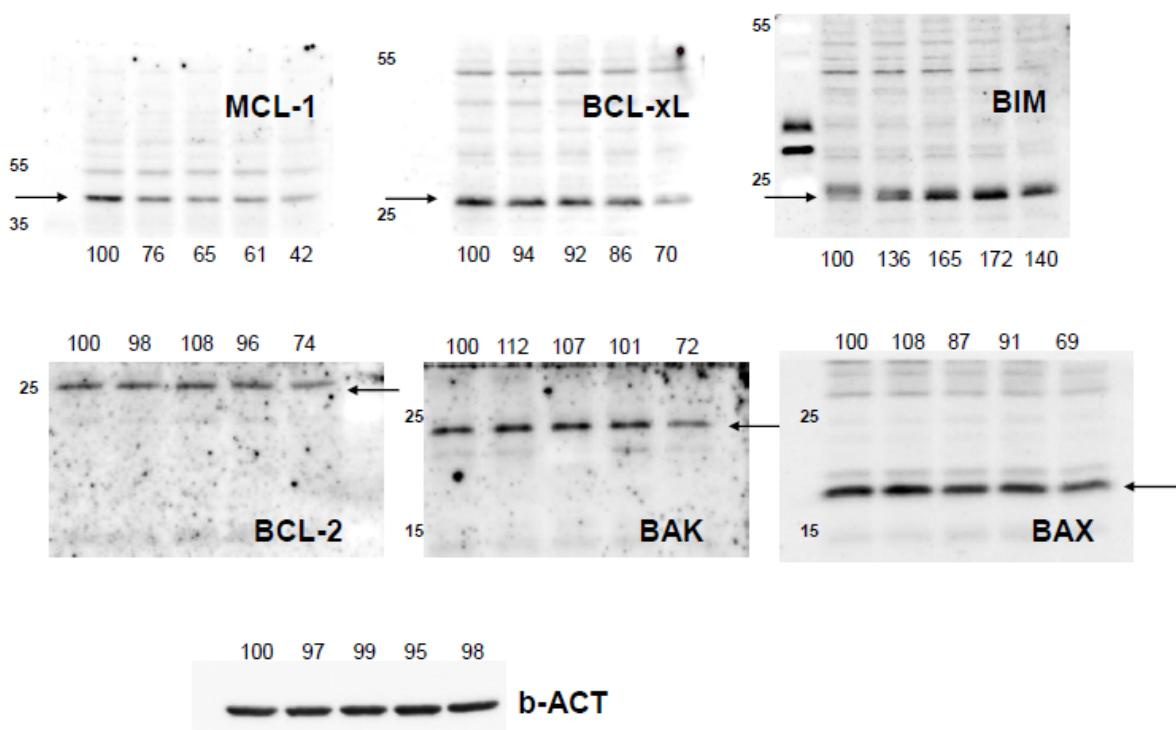


**Figure 4B**



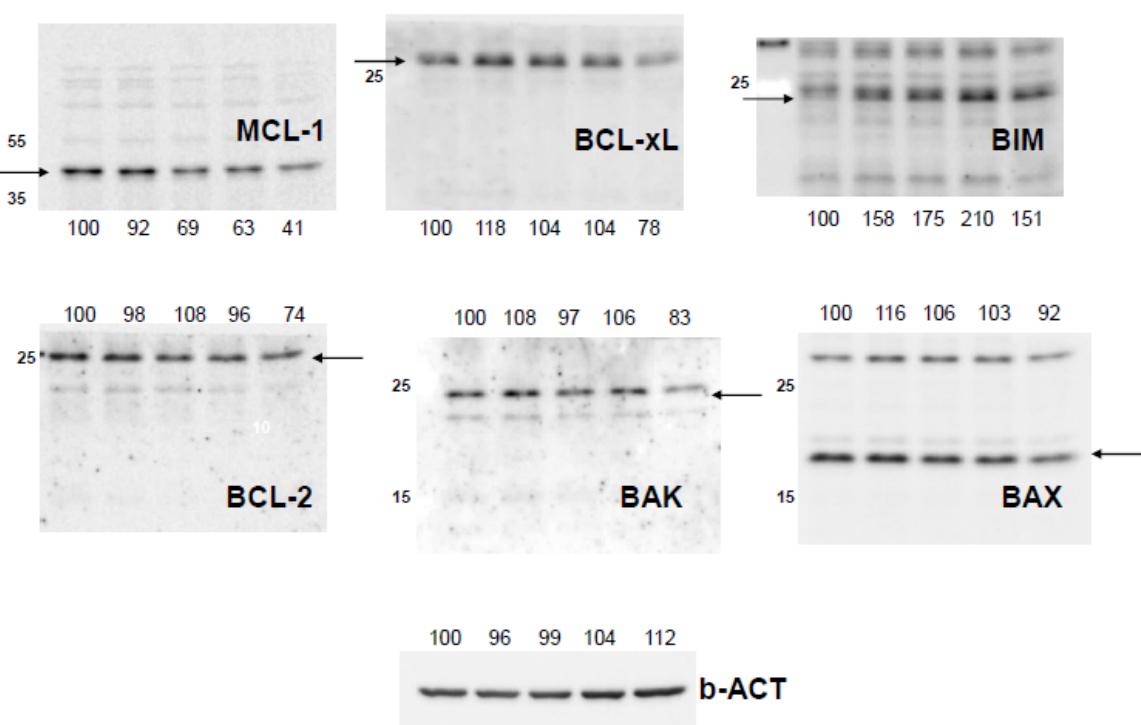
**Figure 5A**

**HEP3B**

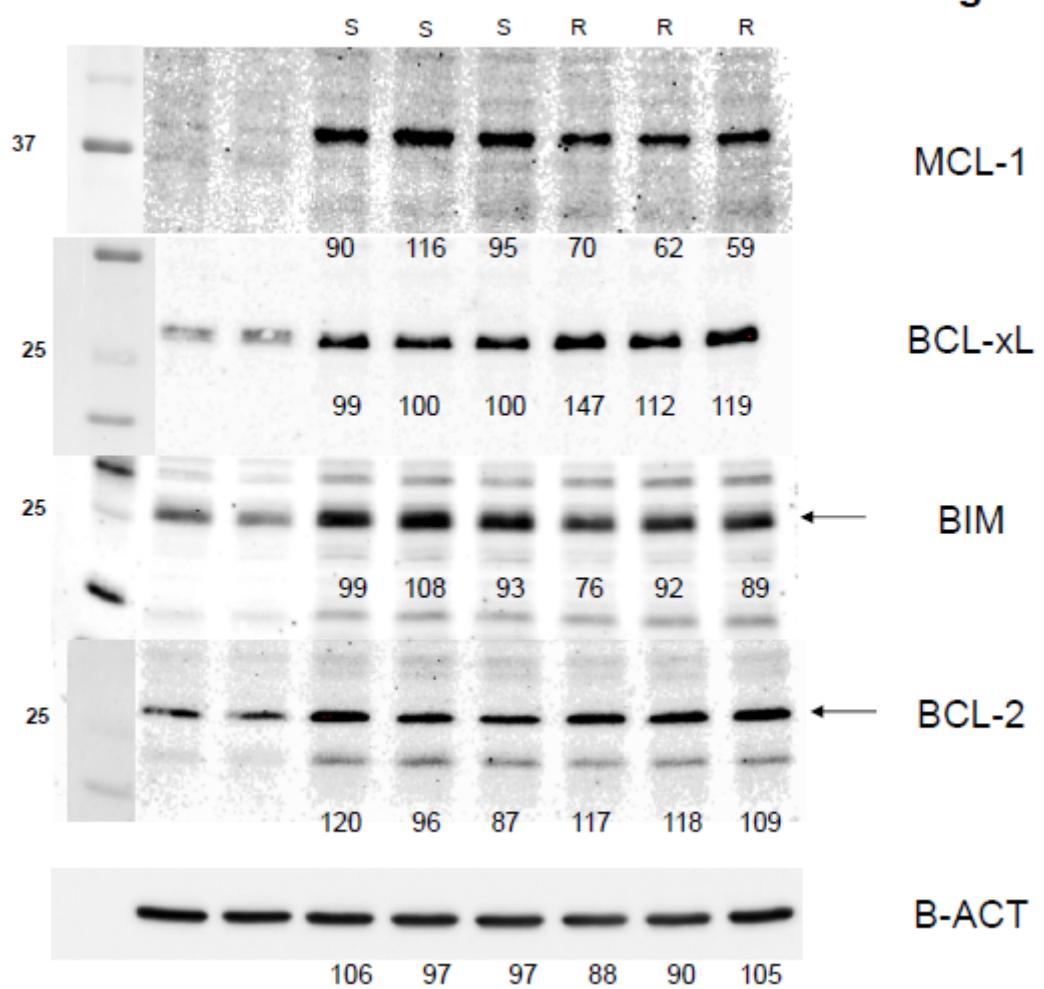


**Figure 5A**

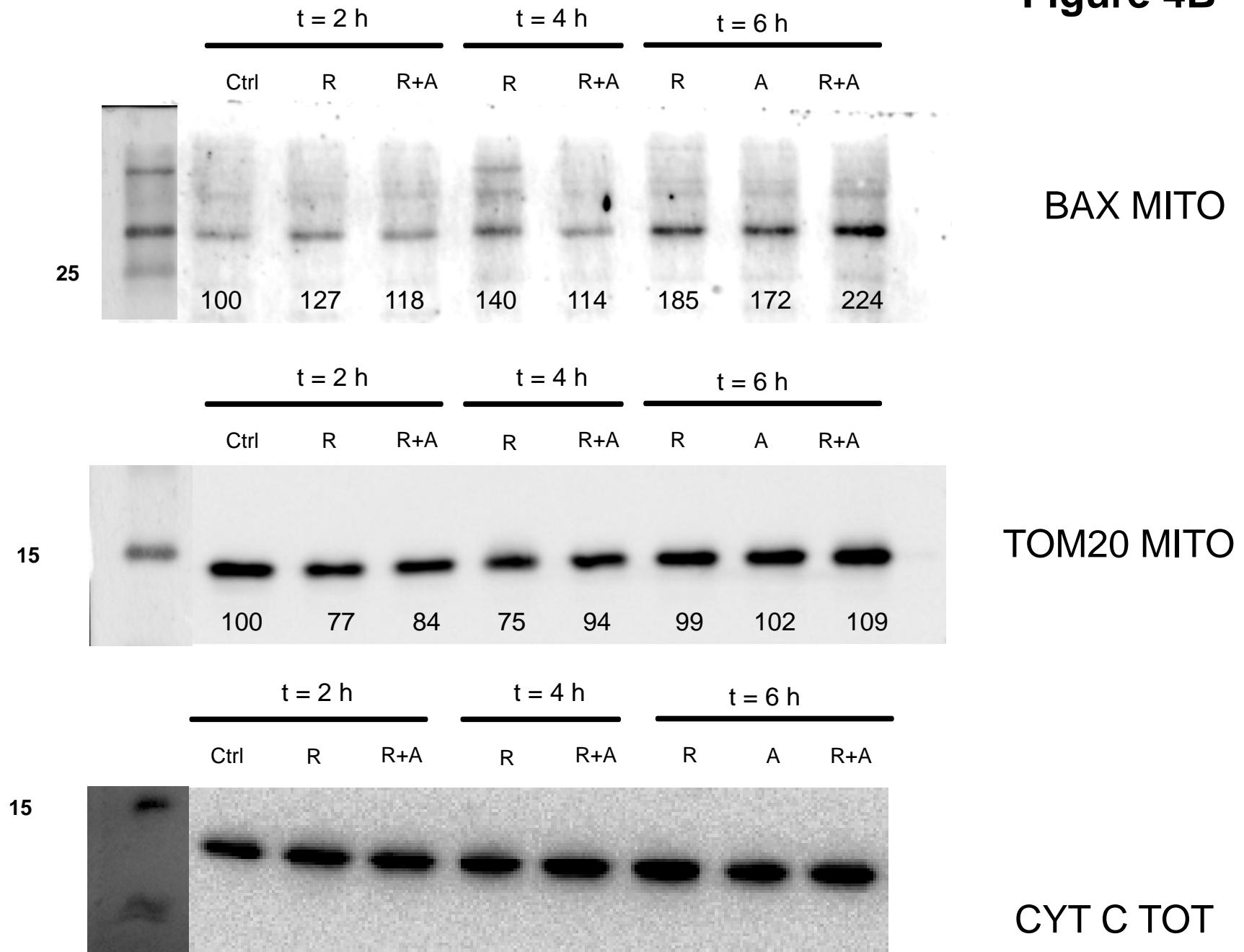
**HEPG2**



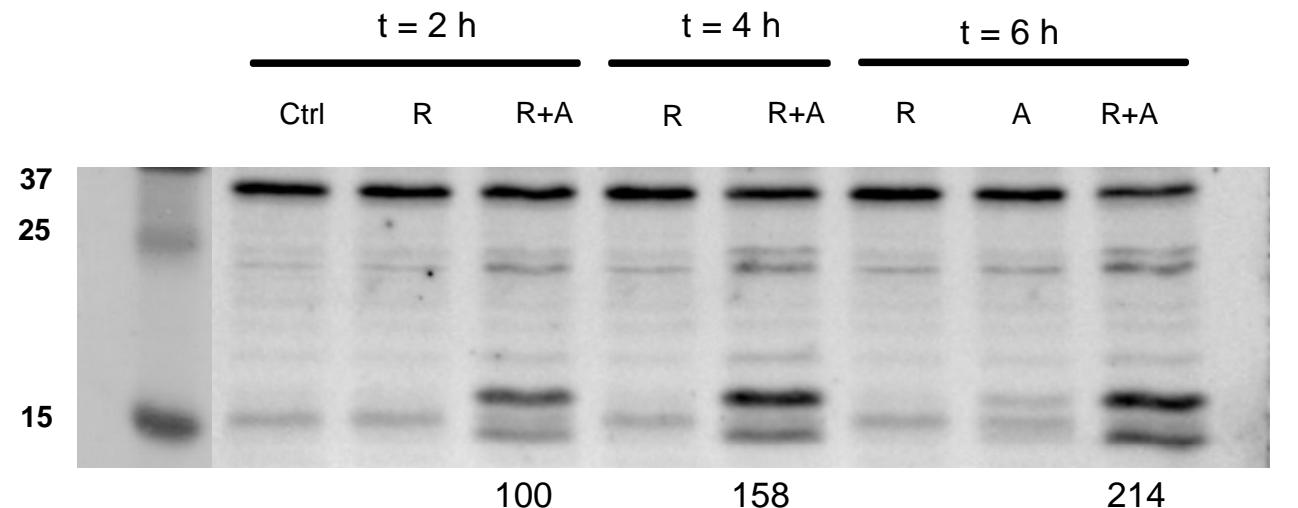
**Figure 7A**



**Figure 4B**

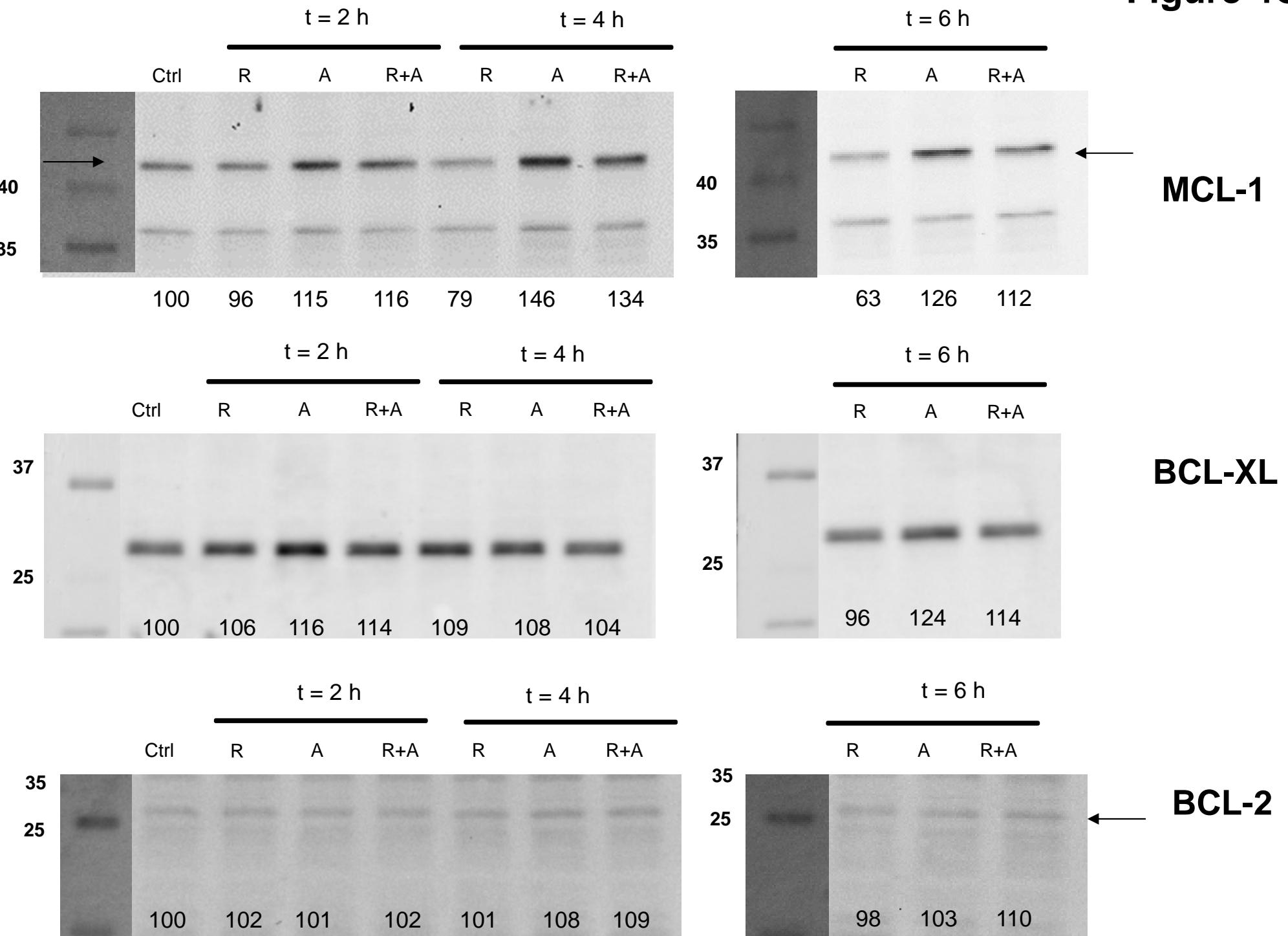


**Figure 4B**



CASP-3 TOT

# Figure 4C



# Figure 4C

