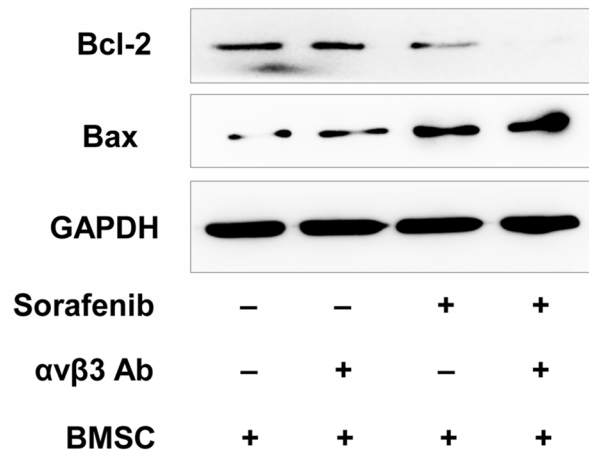
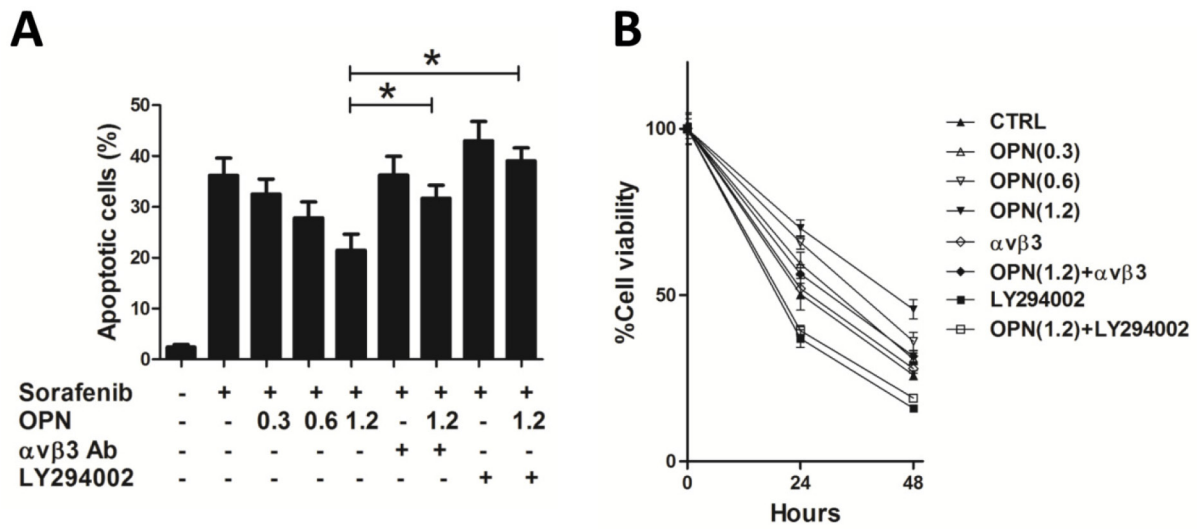


## Integrin alphavbeta3 enhances $\beta$ -catenin signaling in acute myeloid leukemia harboring Fms-like tyrosine kinase-3 internal tandem duplication mutations: implications for microenvironment influence on sorafenib sensitivity

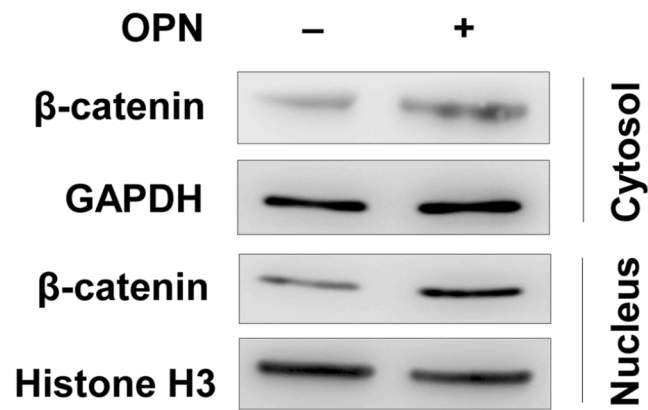
### SUPPLEMENTARY FIGURES



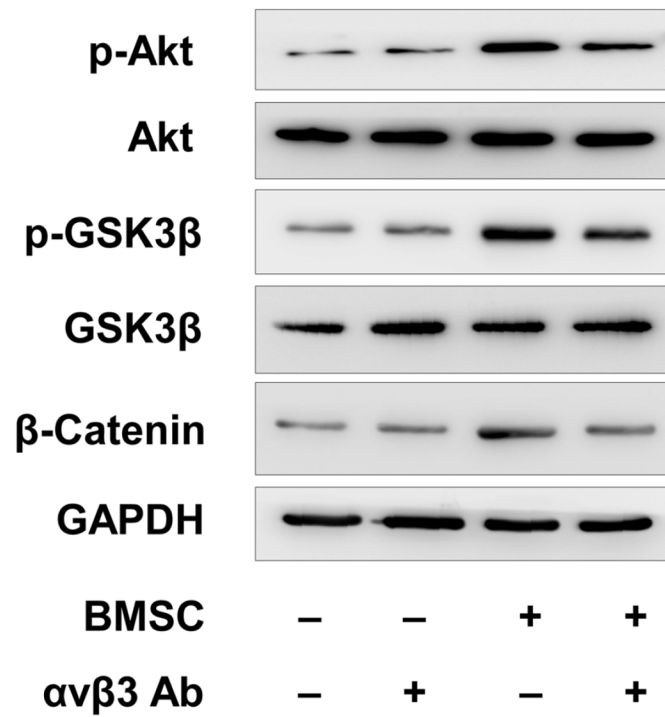
**Supplementary Figure S1: Detection of Bcl-2 and Bax by western blot in MV4-11 cells co-cultured with BMSCs.** MV4-11 cells were seeded onto the BMSC monolayer in 6-well plates with or without  $\alpha\beta 3$  blocking antibody (1 $\mu$ g/ml) for 2 hours, sorafenib (10 $\mu$ M) was then added and cultured for 24 hours. Suspension cells were collected and used for western blot assay.



**Supplementary Figure S2: Integrin  $\alpha\text{v}\beta\text{3}$ / PI3K contribute to sorafenib insensitivity of MV4-11 cells on OPN ligation.** MV4-11 was treated by indicate amount of recombinant human OPN ( $\mu\text{g}/\text{ml}$ ) with or without  $\alpha\text{v}\beta\text{3}$  blocking antibody ( $1\mu\text{g}/\text{ml}$ )/ PI3K inhibitor LY294002 ( $25\mu\text{M}$ ) for 24 hours, sorafenib ( $10\mu\text{M}$ ) was then added and cultured for another 24 hours to 48 hours. Cells were collected and used for apoptosis assay at 24 hours **A.** and cell viability assay at 24, 48 hours **B.**



**Supplementary Figure S3: Increased  $\beta$ -catenin nuclear translocation on OPN ligation.** MV4-11 cells were treated with OPN (1.2  $\mu$ g/ml) for 24 hours, then cells were collected. Nuclear and cytoplasmic protein was extracted and used for western blot assay.



**Supplementary Figure S4: Integrin  $\alpha v \beta 3$  contributes to Akt/ GSK3 $\beta$ /  $\beta$ -catenin activation in MV4-11 cell line when co-cultured with BMSCs.** MV4-11 cells were seeded onto BMSCs with or without  $\alpha v \beta 3$  blocking antibody (1  $\mu$ g/ml) for 24 hours, suspension cells were then collected and used for western blot assay.