

## **Supplementary Figure Legends**

### **Supplementary Figure S1. The full-length gel of Figure 1A.**

- (A) The original, uncropped Western blot image for BCL2 shown in Figure 1A.
- (B) The original, uncropped Western blot image for  $\beta$ -actin in Figure 1A.

### **Supplementary Figure S2. The densitometry ratios of Figure 1A.**

- (A) The densitometry ratio of BCL2 relative to  $\beta$ -actin of Figure 1A was quantified by ImageJ.

### **Supplementary Figure S3. The inhibitory effect of venetoclax on the viable cell numbers of EBV-infected T- or NK-cell lines.**

IC<sub>50</sub> was calculated for each cell line at two time points (24 and 48 hours). The inhibition of cell numbers in the control (0  $\mu$ M) was defined as 0%, and the concentration at which venetoclax inhibited cell numbers by 50% was calculated. The vertical axis represents the percentage of cell count inhibition (InH (%)). The half-inhibitory concentration (IC<sub>50</sub>) was calculated using GraphPad Prism and Excel.

- (A, B) IC<sub>50</sub> value of venetoclax in SNT8 in Figure 1B.
- (C, D) IC<sub>50</sub> value of venetoclax in SNT15 in Figure 1D.
- (E, F) IC<sub>50</sub> value of venetoclax in SNT16 in Figure 1F.
- (G, H) IC<sub>50</sub> value of venetoclax in SNK1 in Figure 1C.
- (I, J) IC<sub>50</sub> value of venetoclax in SNK6 in Figure 1E.
- (K, L) IC<sub>50</sub> value of venetoclax in SNK10 in Figure 1G.
- (M, N) IC<sub>50</sub> value of venetoclax in Karpas231 in Figure 1H.
- (O, P) IC<sub>50</sub> value of venetoclax in SU-DHL10 in Figure 1I.

### **Supplementary Figure S4. The full-length gel for Figure 2B.**

- (A) The original, uncropped western blot image for PARP in Figure 2B.
- (B) The original, uncropped western blot image for Caspase-3 in Figure 2B.
- (C) The original, uncropped western blot image for  $\beta$ -actin in Figure 2B.

**Supplementary Figure S5. The full-length gel for Figure 3A.**

- (A) The original, uncropped western blot image for BCL2 in Figure 3A.
- (B) The original, uncropped western blot image for BAX in Figure 3A.
- (C) The original, uncropped western blot image for BAK in Figure 3A.
- (D) The original, uncropped western blot image for  $\beta$ -actin in Figure 3A.

**Supplementary Figure S6. The inhibitory effect of venetoclax on the viable cell numbers of sCAEBV patients' PBMCs.**

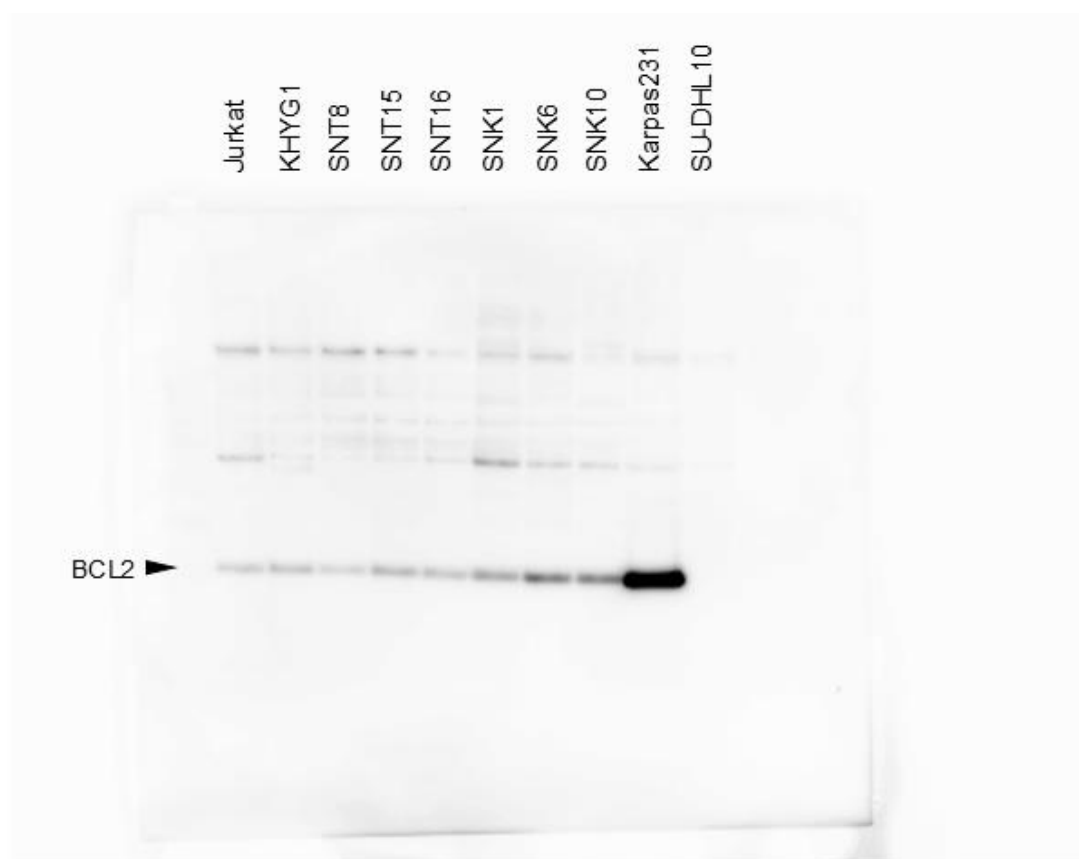
IC50 was calculated for each patient at two time points (24 and 48 hours). The inhibition of cell numbers in the control (0  $\mu$ M) was defined as 0%, and the concentration at which venetoclax inhibited cell numbers by 50% was calculated. The vertical axis represents the percentage of cell count inhibition (InH (%)). The half-inhibitory concentration (IC50) was calculated using GraphPad Prism and Excel.

- (A, B) IC50 value of venetoclax in Patient 1 in Figure 4A.
- (C, D) IC50 value of venetoclax in Patient 2 in Figure 4B.
- (E, F) IC50 value of venetoclax in Patient 3 in Figure 4C.
- (G, H) IC50 value of venetoclax in Patient 4 in Figure 4D.
- (I, J) IC50 value of venetoclax in Patient 5 in Figure 4E.

**Supplementary Figure S7. The effect of venetoclax to the expression of phospho-STAT3.**

- (A, B) The expression of phospho-STAT3 (Tyr705), phospho-STAT3 (Ser727) and STAT3 before and after the stimulation with 1  $\mu$ M venetoclax was detected by western blotting analysis and quantified in the densitometry ratios relative to  $\beta$ -actin in (A) SNT8, SNT15, SNT16 and (B) SNK1, SNK6, SNK10.

Figure S1 A



B

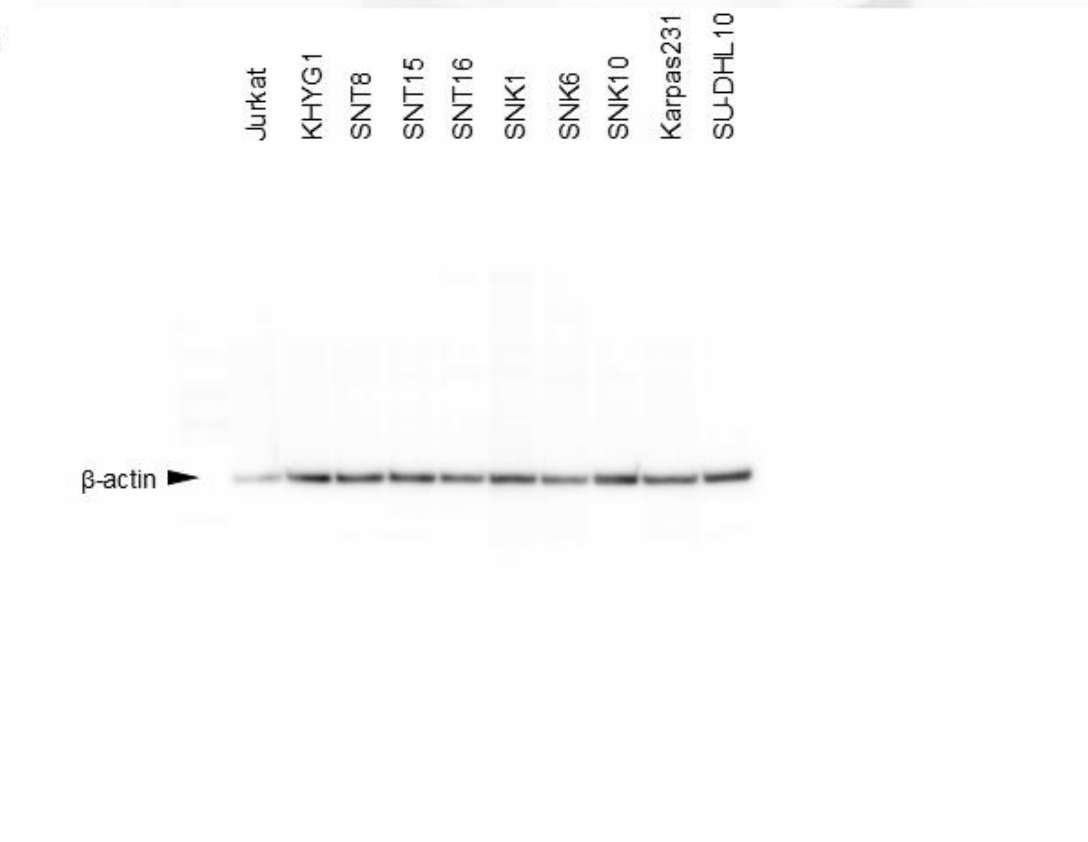


Figure S2

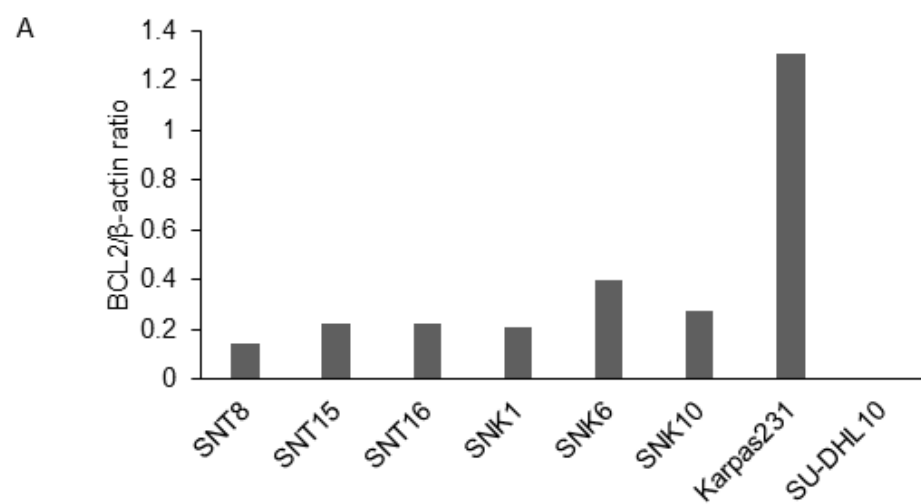


Figure S3

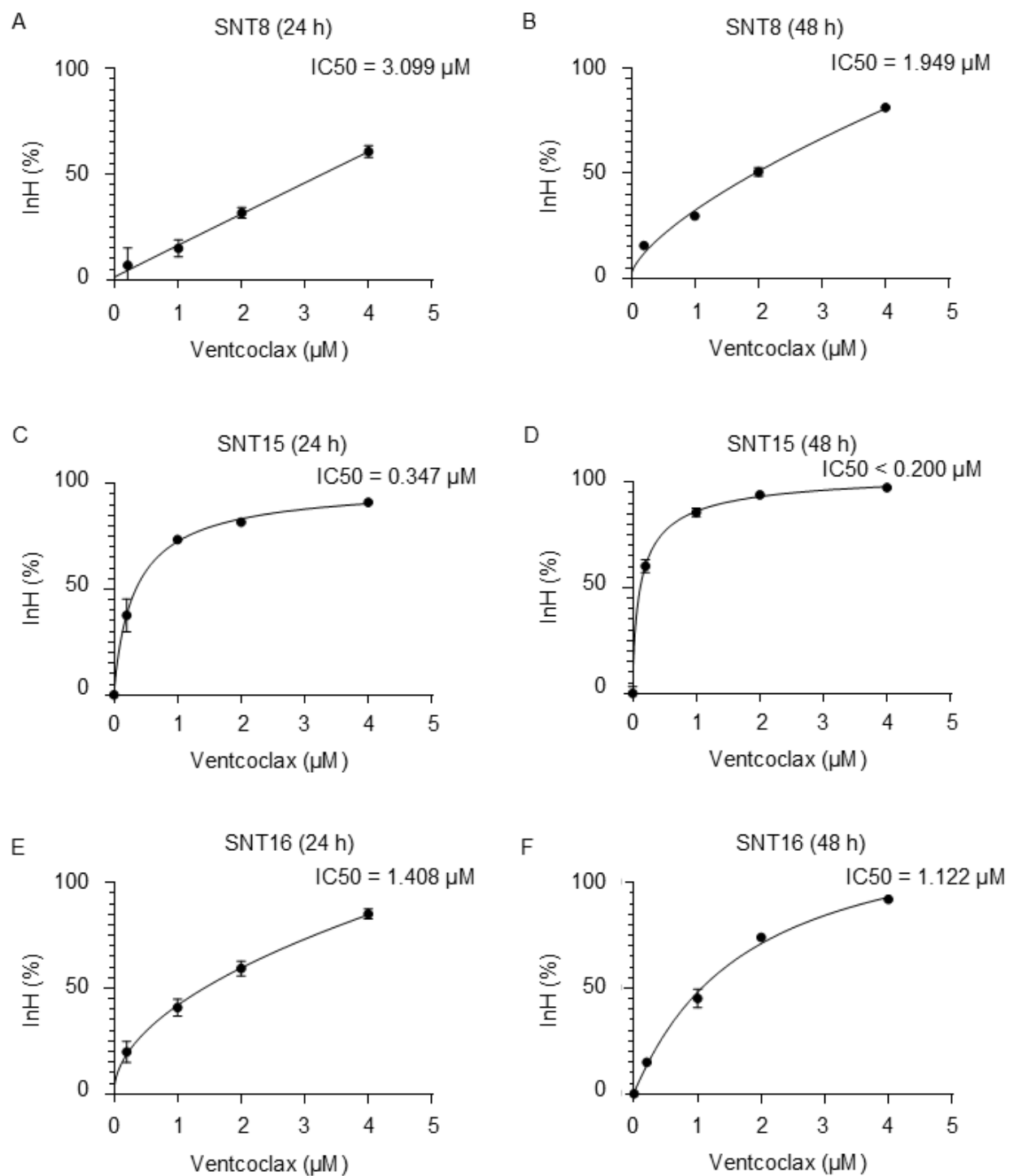


Figure S3

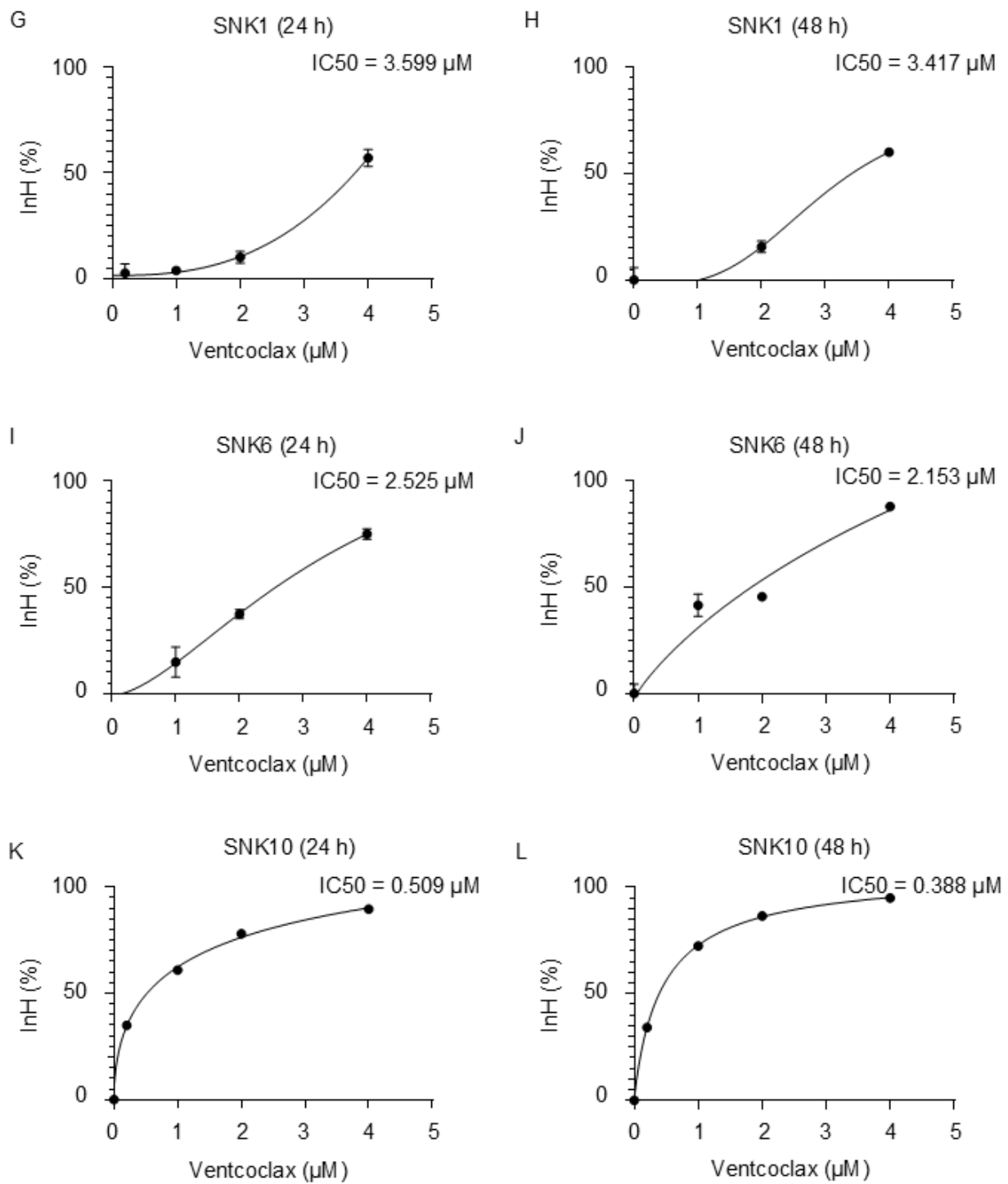


Figure S3

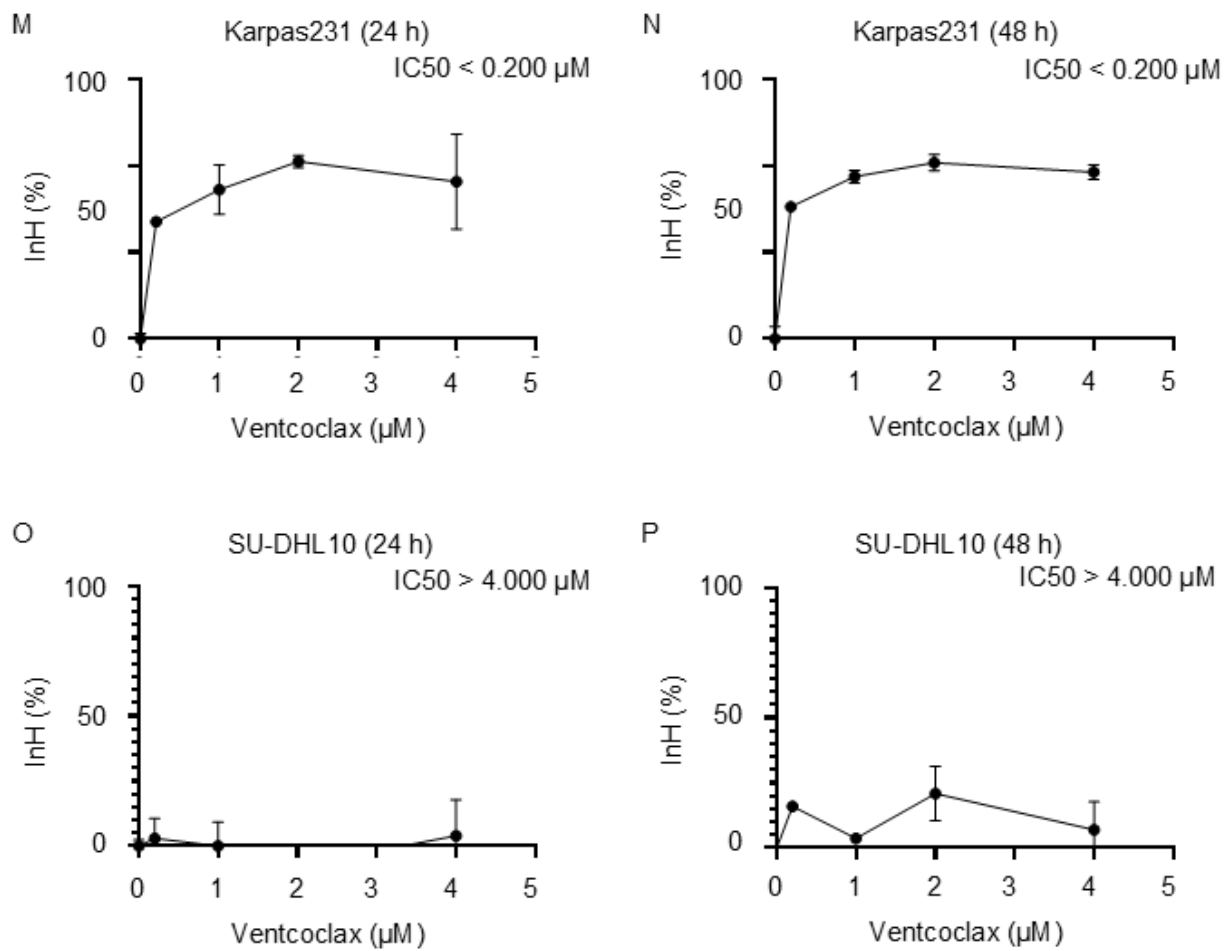
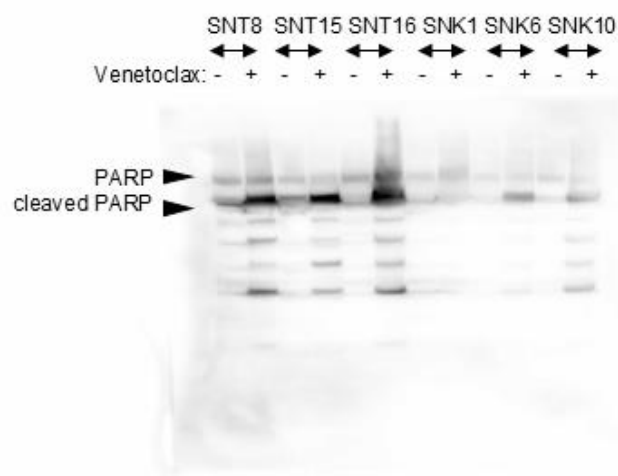
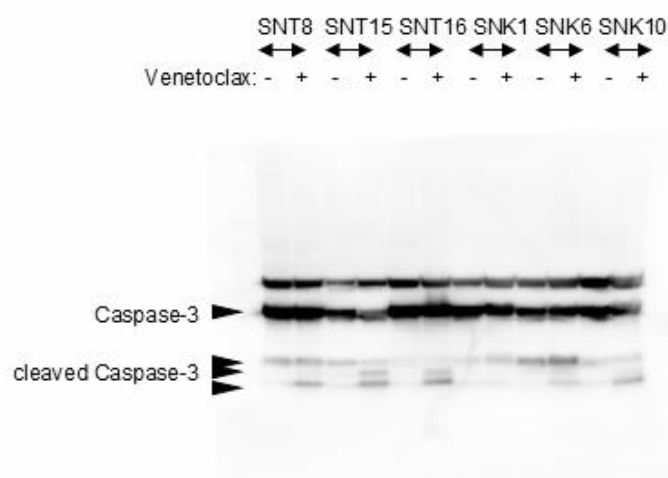


Figure S4 A



B



C

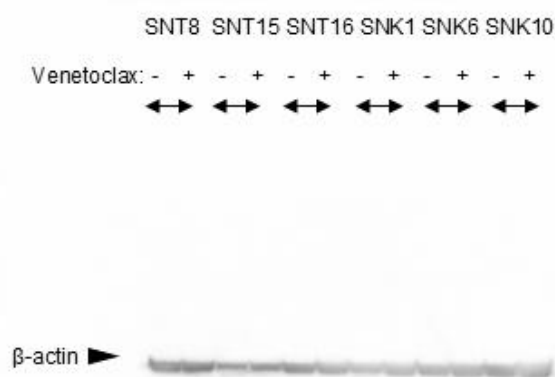




Figure S5

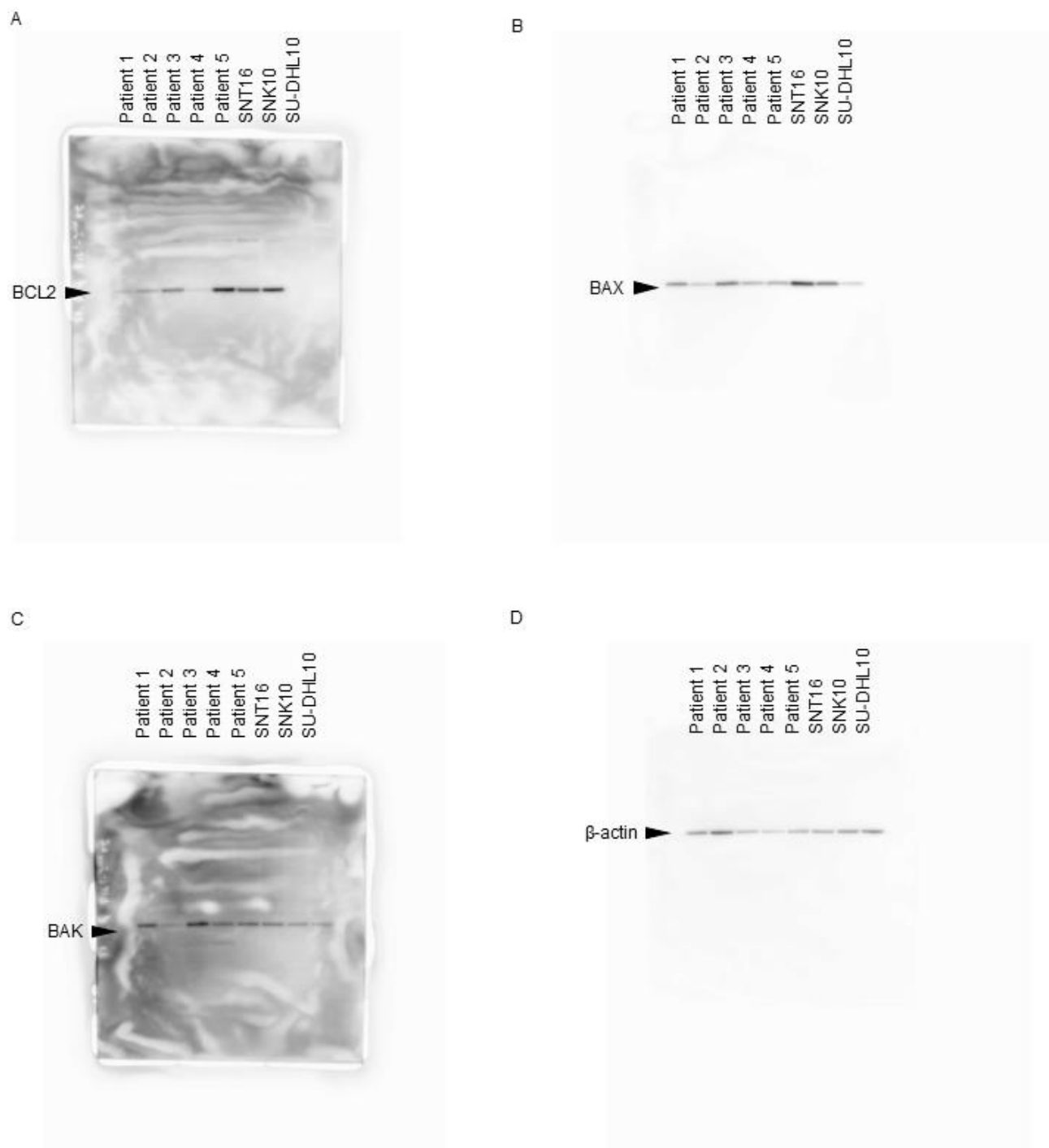


Figure S6

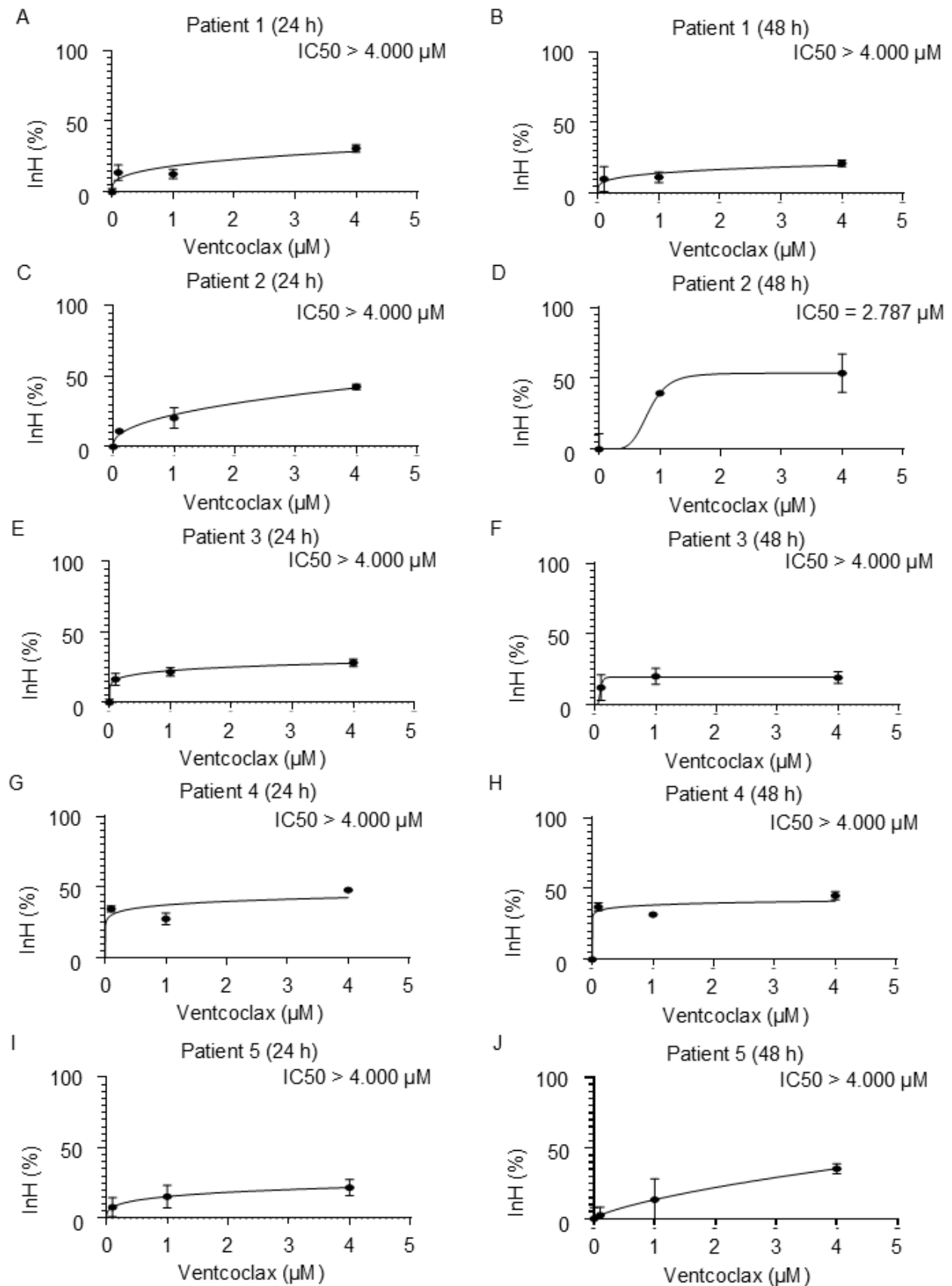


Figure S7

