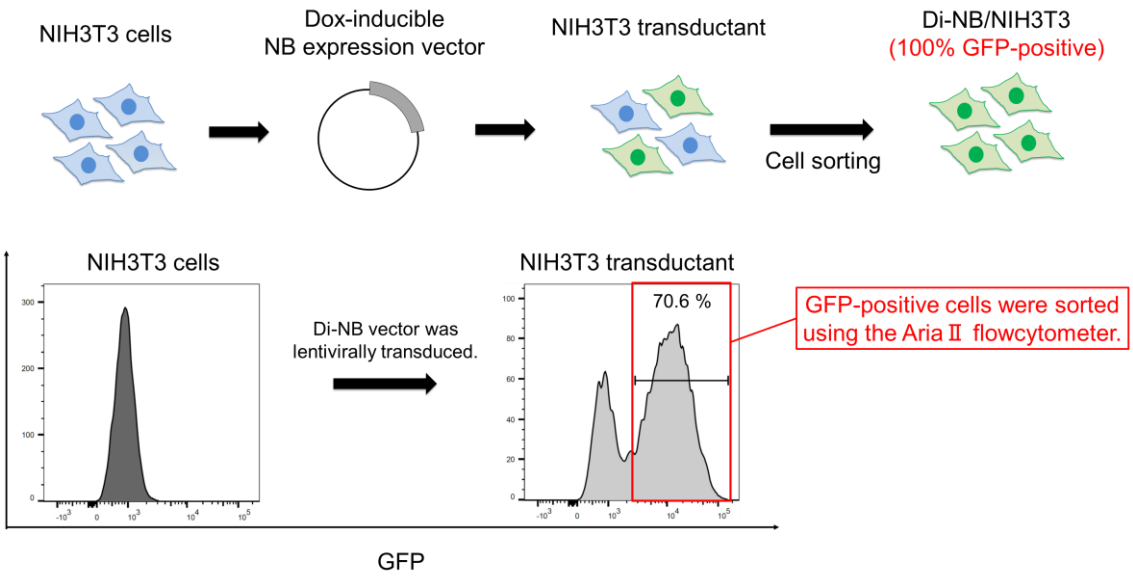
# Supplemental Figures

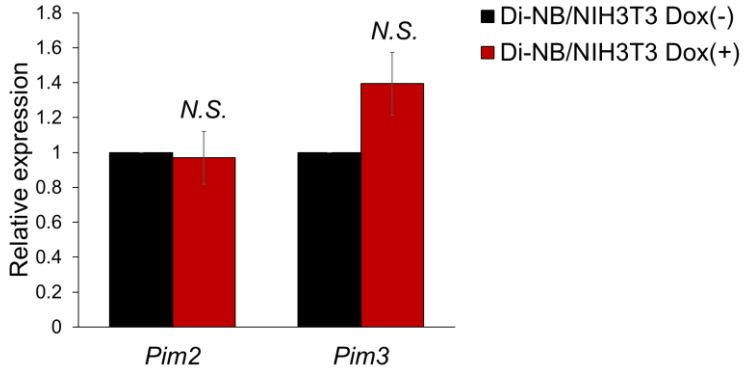
**NUP98-BPTF promotes oncogenic transformation through PIM1 upregulation**

Mina Noura, Sakura Tomita, Takahiko Yasuda, Shinobu Tsuzuki, Hitoshi Kiyoi, Fumihiko Hayakawa.



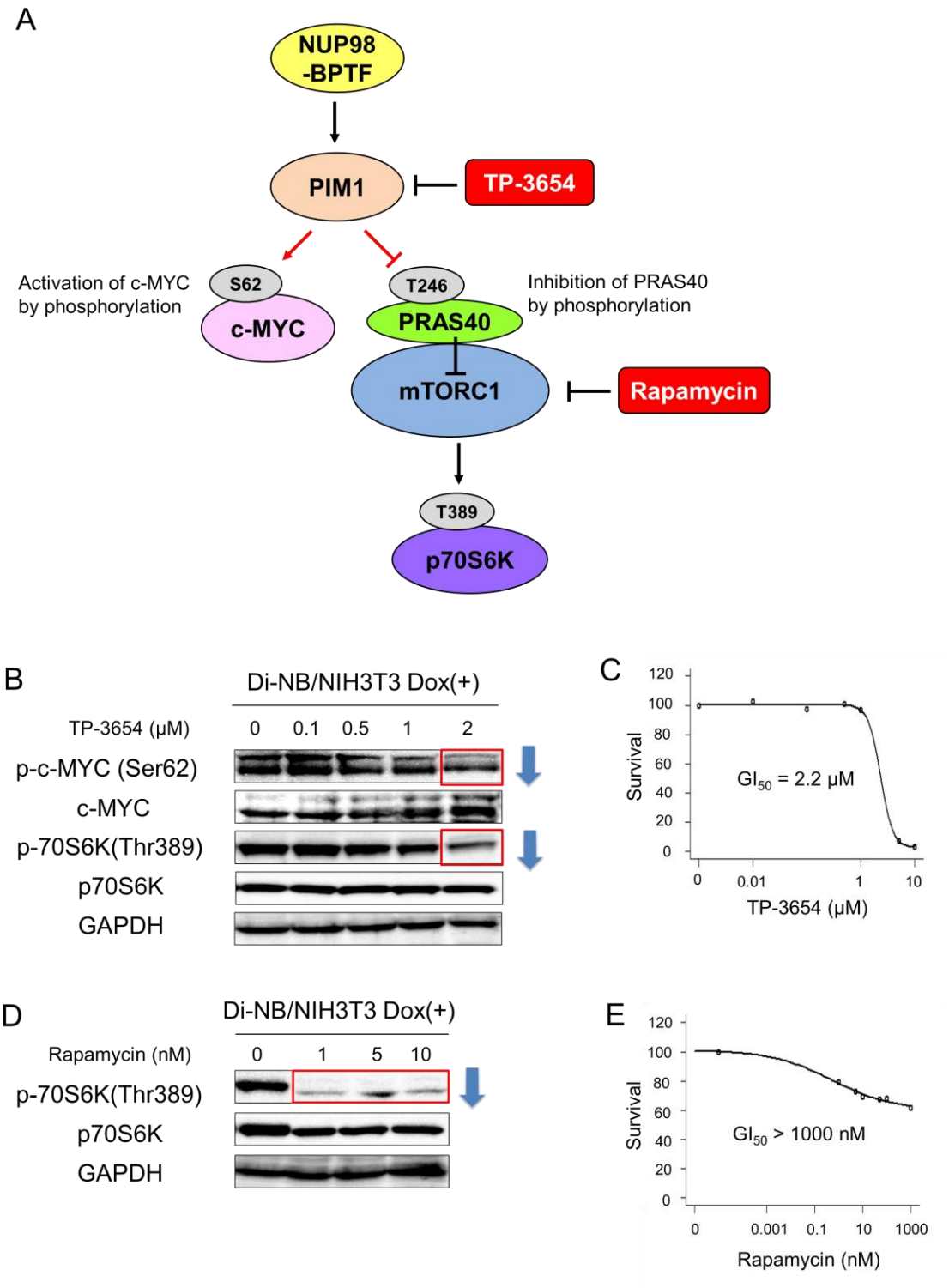

**Supplemental Figure 1**

Flow cytometric sorting of the GFP-positive NIH3T3 cells. The NIH3T3 cells were lentivirally transduced a Dox-inducible NB expression vector. The successfully transduced GFP-positive cells were sorted using a flow cytometer (Di-NB/NIH3T3).




**Supplemental Figure 2**

Exogenous NB expression did not change the mRNA expression levels of *Pim2* and *Pim3*. The cells were treated with or without Dox for 72 h, and then total RNA was prepared and analyzed by RT-qPCR. The values were normalized to the expression levels of *Gapdh* (n = 3).

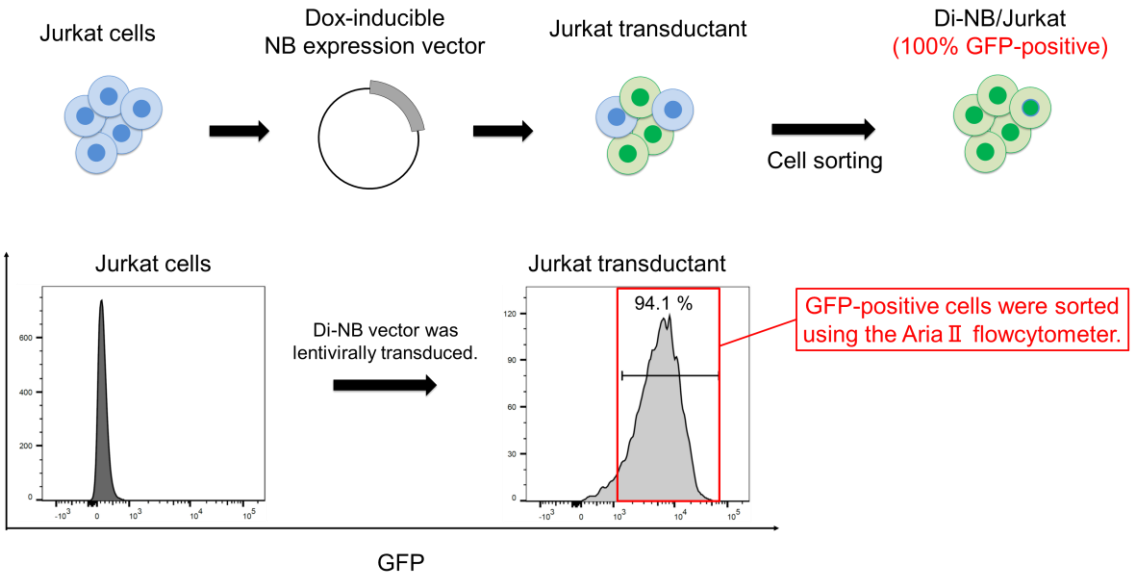



**Supplemental Figure 3**

(A) Schematic illustration of the MYC and mTORC1 signaling activated by NB-induced PIM1 expression.

(B) TP-3654 decreased the phosphorylation levels of c-MYC and p70S6K in the Dox-

treated Di-NB/NIH3T3. The cells were treated with Dox and the indicated concentrations of Rapamycin for 72 h and then lysed for protein extraction.
(C) Dose-response curves for TP-3654 in the Dox-untreated Di-NB/NIH3T3. The cells were treated with TP-3654 for 72 h at various concentrations. The $GI_{50}$ values of TP-3654 were calculated (n = 3).
(D) Rapamycin decreased the phosphorylation levels of p70S6K in the Dox-treated Di-NB/NIH3T3. The cells were treated with Dox and the indicated concentrations of Rapamycin for 72 h and then lysed for protein extraction.
(E) Dose-response curves for Rapamycin in the Dox-untreated Di-NB/NIH3T3. The cells were treated with Rapamycin for 72 h at various concentrations. The $GI_{50}$ values of Rapamycin were calculated (n = 3).




**Supplemental Figure 4**

Flow cytometric sorting of the GFP-positive Jurkat cells. The Jurkat cells were lentivirally transduced a Dox-inducible NB expression vector. The successfully transduced GFP-positive cells were sorted using a flow cytometer (Di-NB/Jurkat).