

Supplemental Figure 1

(A) Expression of *NLP* mRNA in human cell lines was examined using RT PCR. 0.5 µg of total RNA isolated from different human cancer lines (esophageal cancer, cervical cancer and lung cancer cells) and non-cancerous line HEK293T were used for semi-quantitative RT PCR assays. (B) Human lung cancer and their normal adjacent tissues were examined using genomic PCR Southern blot analysis. **The PCR-amplified DNA was hybridized with *NLP* and *GAPDH* probes. The estimated sizes of hybridized bands were 700 bp for *NLP* and 400 bp for *GAPDH* respectively.** Results for 5 representative samples (#1, #8, #9, #11 and #14) were shown.

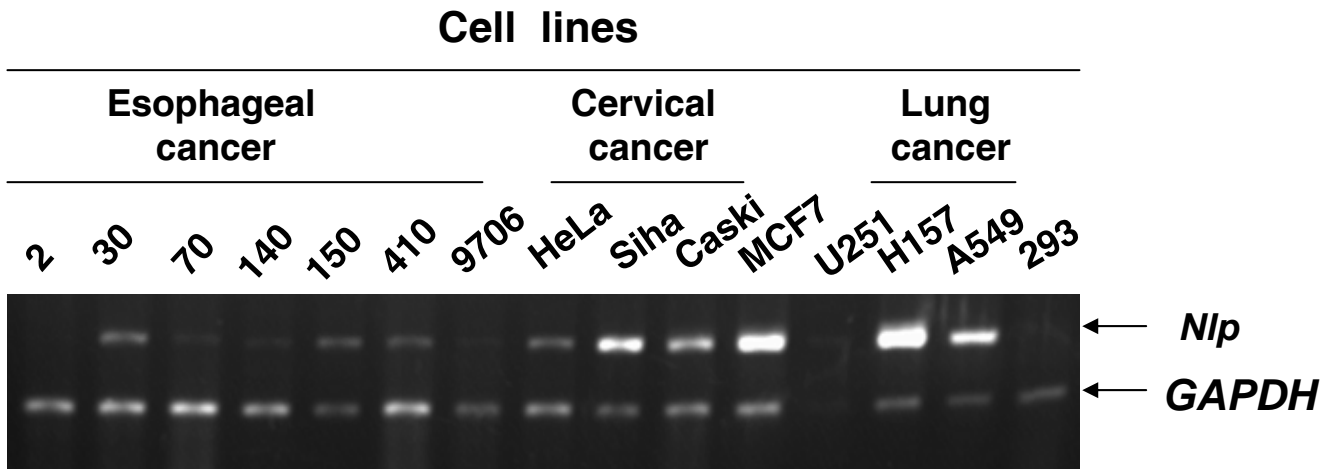
Supplemental Fig. 2

Malignant histopathology of lymphomas induced by ionizing radiation (IR) in *Nlp* transgenic mice. Normal and *Nlp*-transgenic mice were treated with ionizing radiation (IR) at a total dose of 9 Gy. 32 weeks after treatment, the animals developed lymphomas. Only histopathology of tumors in transgenic mice is shown here. (A-B) Normal thymus structure was destroyed by lymphomas. There was no any normal thymus structure seen in the tumor tissue since the lymphoma cells were dispersed in whole field of image. (C-D) Lymphoma invaded to pericardium. (E-F) Lymphoma invaded to lung tissues and invasive tumor cells were observed under the bronchial epithelium. (G-H) Lymphoma invaded to striated muscles of chest wall. (I-J) The

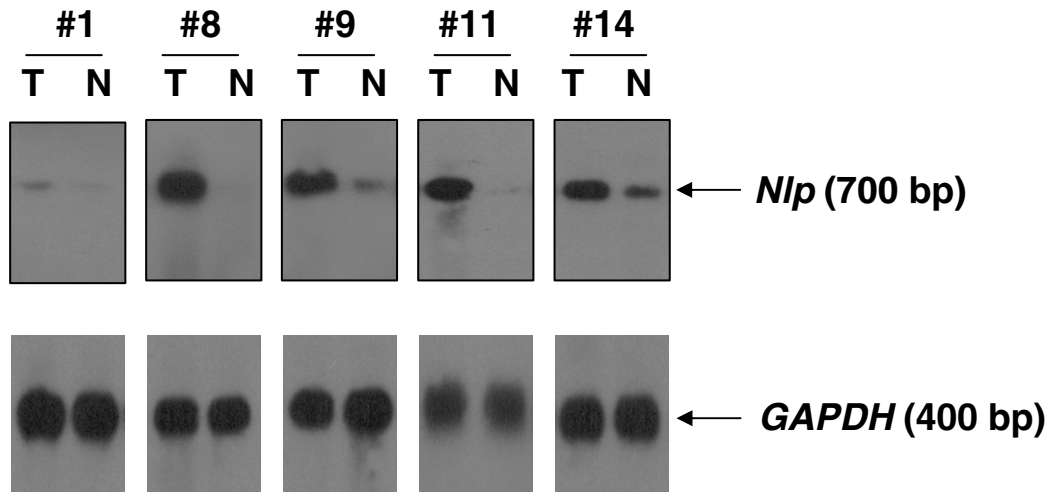
malignant lymphoma cells were seen between the hepatic cell cords and liver sinus.

(**K-L**) Lymphoma cells were observed between glomeruli and renal tubules in the cortex. **Original magnification, ×100 (left panel) and × 200 (right panel).**

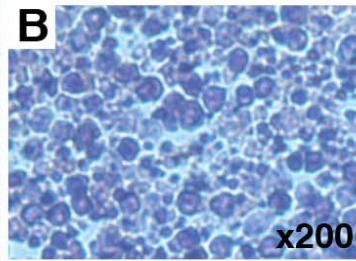
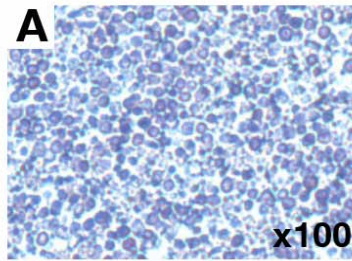
A



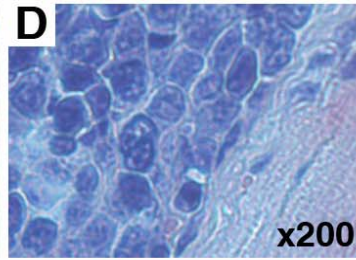
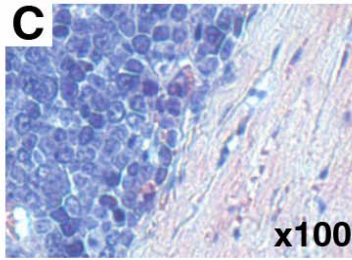
B



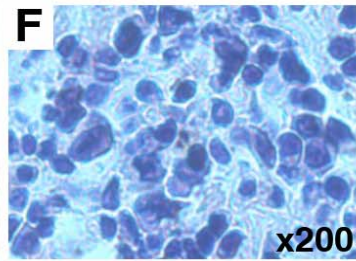
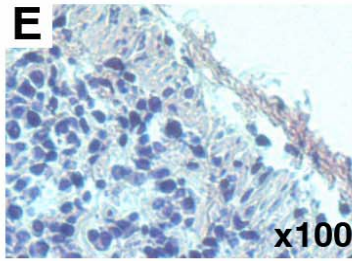
Thymic lymphoma



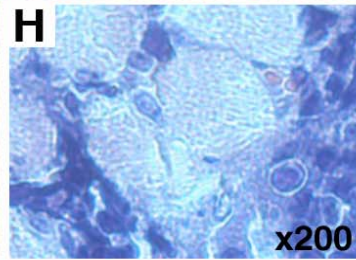
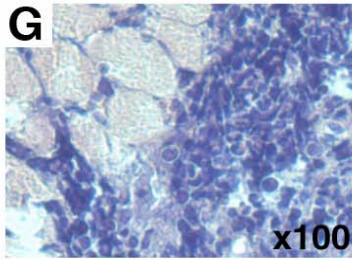
Pericardium invasion



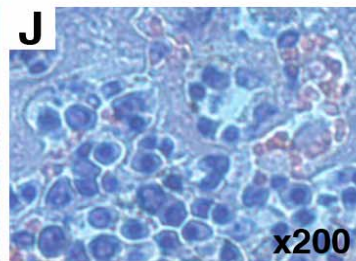
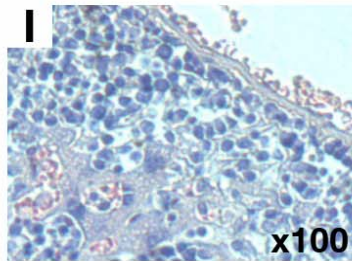
Lung invasion



Striated muscle invasion



Liver invasion



Kidney invasion

