

Supplemental Table 1 Single gene knockout or over-expression that increase the frequency and/or alter the histology of malignancy in p53^{-/-} mice.

Gene	Type of malignancy	Ref.
HSF1	Sarcoma; Lung Adenocarcinoma	(1)
MSH2	Lymphoma, Sarcoma	(2)
BAX *	Lymphoma	(3)
FASL *	Lymphoma	(4)
FBXW7 *	Lung, Liver and Ovarian Adenocarcinoma	(5)
APC	Renal Carcinoma	(6)
K-Ras	Colon and Lung Adenocarcinoma	(7)
MAD1,MAD2	Lymphoma; Osteosarcoma	(8)
SNF5	Lymphoma	(9)
E2F1	Sarcoma	(10)
NQO1	Lymphoma; Lung Adenocarcinoma	(11)
Patched1	Medulloblastoma	(12)
SIRT1	Sarcoma, Lymphoma, Teratoma, Carcinoma	(13)
BRCA2	Lymphoma	(14)
P27 or p18	Colon Carcinoma; and Sarcoma	(15)
TGFβ **	Pancreatic Adenocarcinoma (reduced)	(16)
sPRDM16 **	Acute Myeloid Leukemia	(17)

**indicates transgenic over-expression of the gene; all others are effects of homozygous or heterozygous knockout. *indicates experimentally determined presence of haploinsufficiency phenomenon.

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