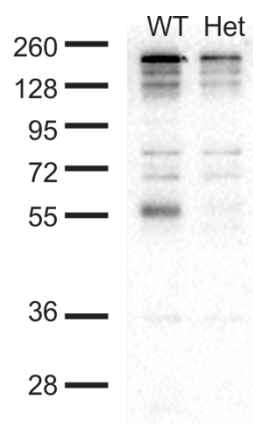


***In vivo* evidence that RBM5 is a tumour suppressor in the lung**

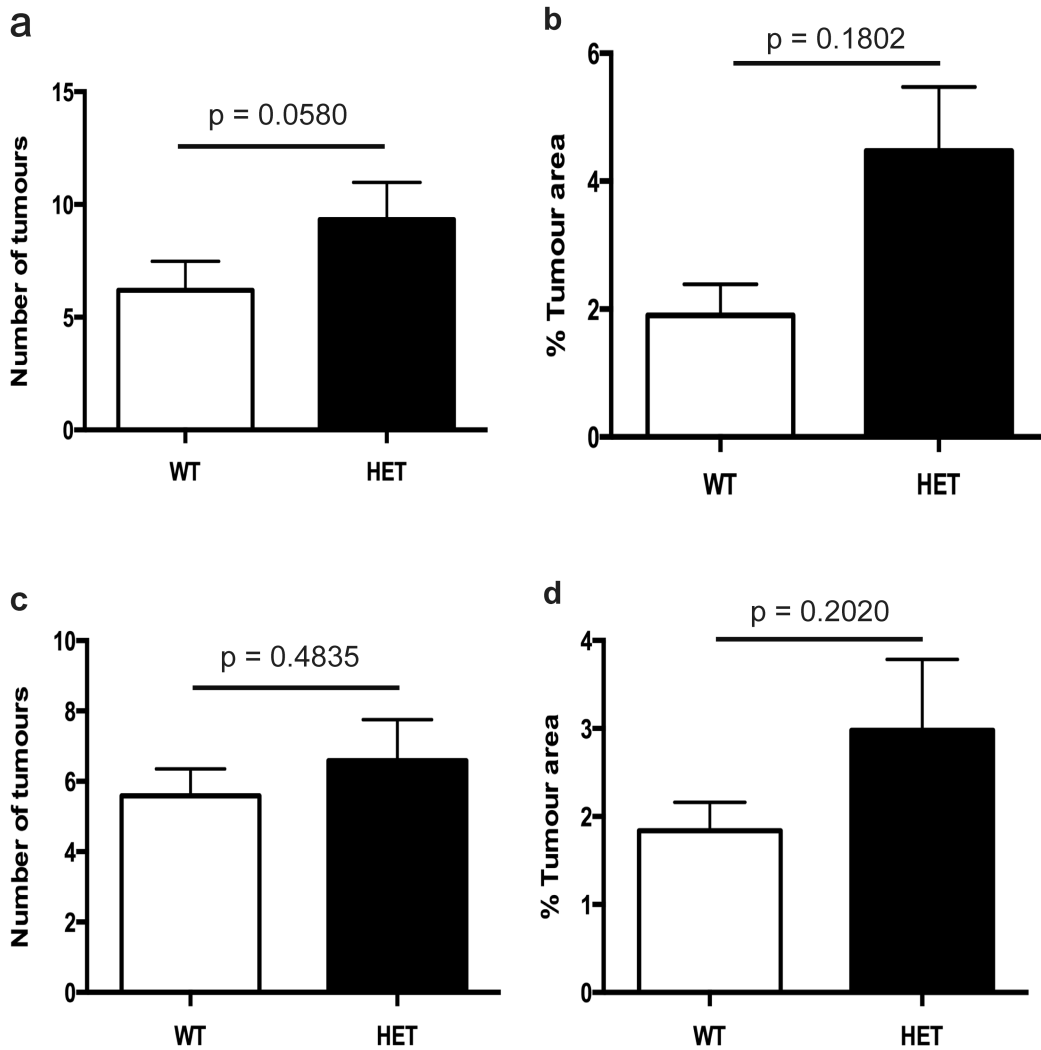
Duangporn Jamsai¹, D. Neil Watkins², Anne E. O'Connor¹, D. Jo Merriner¹, Selen Gursoy¹, Anthony D. Bird³, Beena Kumar⁴, Alistair Miller⁵, Timothy J. Cole⁶, Brendan J. Jenkins⁷, Moira K. O'Bryan^{1,*}

Supplementary Table 1: Pathology report of lung samples collected at 48 weeks post-NNK injection

Reference number	Genotype	Number of tumour nodules	Dimension of tumour nodules (mm)	Tumour type
10.199	WT	1	1	Adenocarcinoma
10.205	WT	2	0.3-0.8	Adenocarcinoma
10.206	WT	4	0.5-1	Adenocarcinoma
10.200	WT	6	0.3-1	Adenocarcinoma
10.210	WT	5	1.0-4	Adenocarcinoma
10.208	HET	7	1-5	Adenocarcinoma
10.198	HET	9	2-6	Adenocarcinoma
10.203	HET	9	0.5-5	Adenocarcinoma
10.201	HET	10	0.5-3	Adenocarcinoma
10.220	HET	14	0.2-3	Adenocarcinoma
10.221	HET	14	0.5-4	Adenocarcinoma

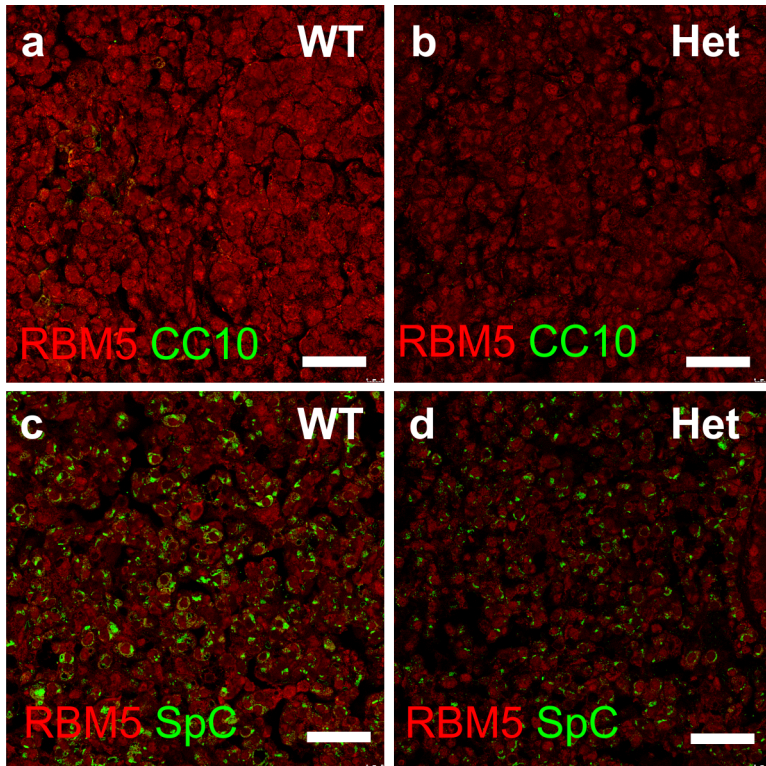


Supplementary Figure 1: A western blot illustrating the reduction in RBM5 protein in *Rbm5*^{+/-} adult lung tissue compared to the corresponding *Rbm5*^{+/+} tissue.



Supplementary Figure 2: *Rbm5* is not critical for the initiation of NNK-induced lung cancer

(A-B) Lung tumour analysis of *Rbm5*^{+/-} (HET) and *Rbm5*^{+/+} (WT) mice at 16 weeks post-NNK injection. n = 5 for WT and n = 6 for HET. (C-D) Lung tumour analysis of *Rbm5*^{+/-} (HET) and *Rbm5*^{+/+} (WT) mice at 20 weeks post-NNK injection. n = 12 for each genotype. No significant difference was observed at these two time points indicating that *Rbm5* is not critical for the formation of NNK-induced lung cancer.



Supplementary Figure 3: Immunolabelling of tumour tissue within 48 weeks post-NNK injected wild type (WT) and *Rbm5*^{+/-} (het) mice for RBM5 (red) and CC10 (green panels A-B) and Pro-SPC (SpC, green, panels C-D). Scale bar equals 50µm.