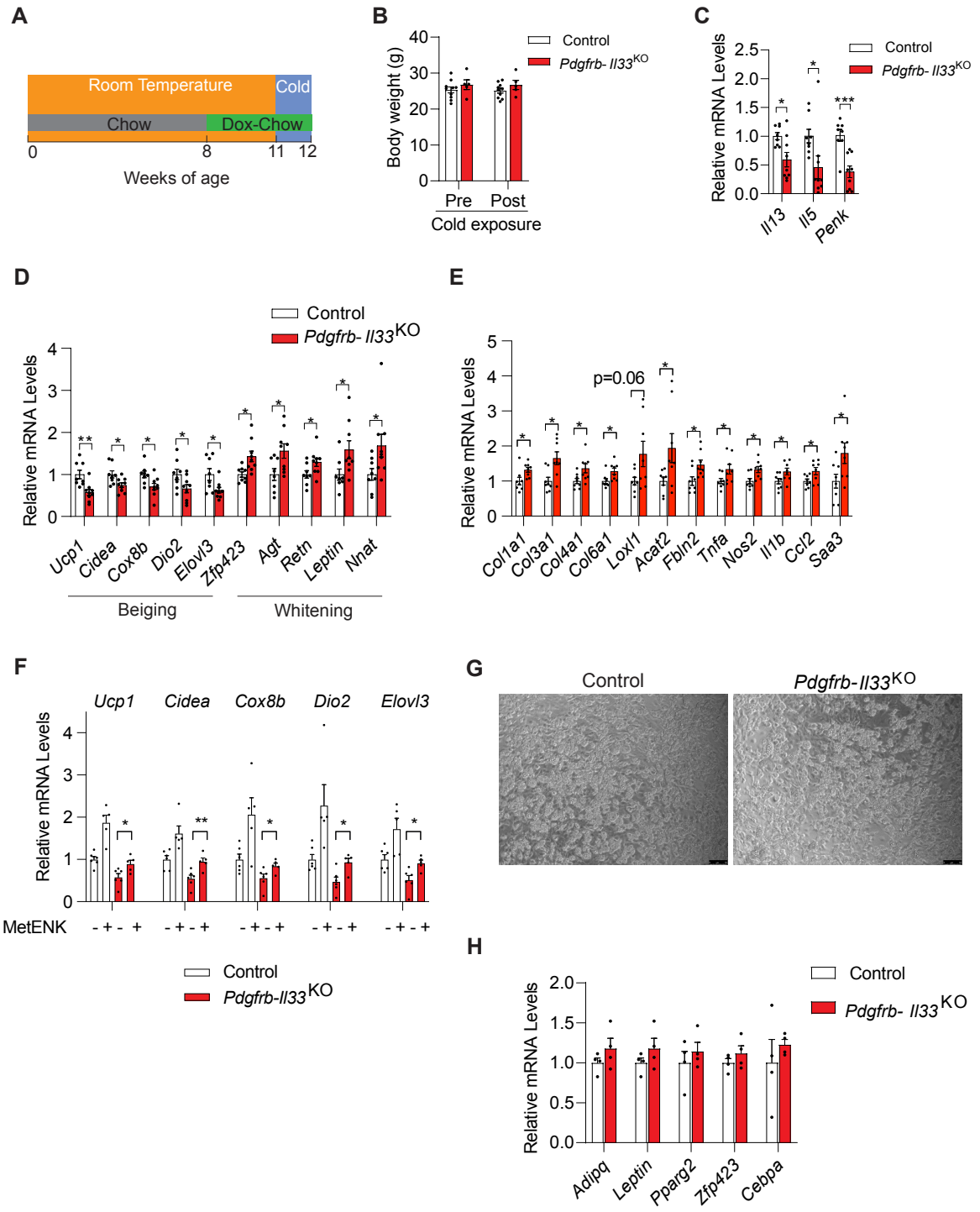

Fig. S8. Inducible inactivation of *Il33* in PDGFRβ+ cells of adult mice impairs cold-induced iWAT thermogenic remodeling

A) Experimental design: Room temperature housed 8 weeks-old *Pdgfrb-Il33*^{KO} and Control mice were switched to a doxycycline-containing chow diet (Dox-Chow) for 3

weeks to ensure gene inactivation. Mice were then cold exposed for 7 days prior to analysis.

B) Body weights before pre- and post- or cold exposure. Control, n=11; *Pdgfrb-Il33*^{KO}, n=5.

C) mRNA levels of ILC2-expressing genes within whole iWAT following cold exposure. Control, n=8; *Pdgfrb-Il33*^{KO}, n=9.

D) mRNA levels of indicated beige adipocyte selective genes and white adipocyte selective genes within whole iWAT depots following cold exposure. Control, n=8; *Pdgfrb-Il33*^{KO}, n=9.

E) mRNA levels of indicated genes related to extracellular matrix remodeling and inflammation within whole iWAT depots following cold exposure. Control, n=8; *Pdgfrb-Il33*^{KO}, n=8.

F) mRNA levels of indicated beige adipocyte selective genes within whole iWAT depots of Control and *Pdgfrb-Il33*^{KO} mice treated exposed to cold temperatures for one week and treated with or without MetENK. Control + vehicle, n=6; Control + MetENK, n=5; *Pdgfrb-Il33*^{KO} + vehicle, n=6; *Pdgfrb-Il33*^{KO} + MetENK, n=5.

G) Representative brightfield images of the differentiated adipocytes induced from isolated DPP4+ APCs of Control and *Pdgfrb-Il33*^{KO} mice. The cells were pooled from both inguinal depots of 4 mice.

H) mRNA levels of indicated adipocyte-selective transcripts within cultures of differentiated adipocytes induced from isolated DPP4+ APCs of Control and *Pdgfrb - Il33*^{KO} mice. The cells were pooled from both inguinal depots of 4 mice.

In all panels, bars represent mean + s.e.m. *p< 0.05, **p<0.01 or ***p<0.001 by two-tailed unpaired Student's *t*-test.