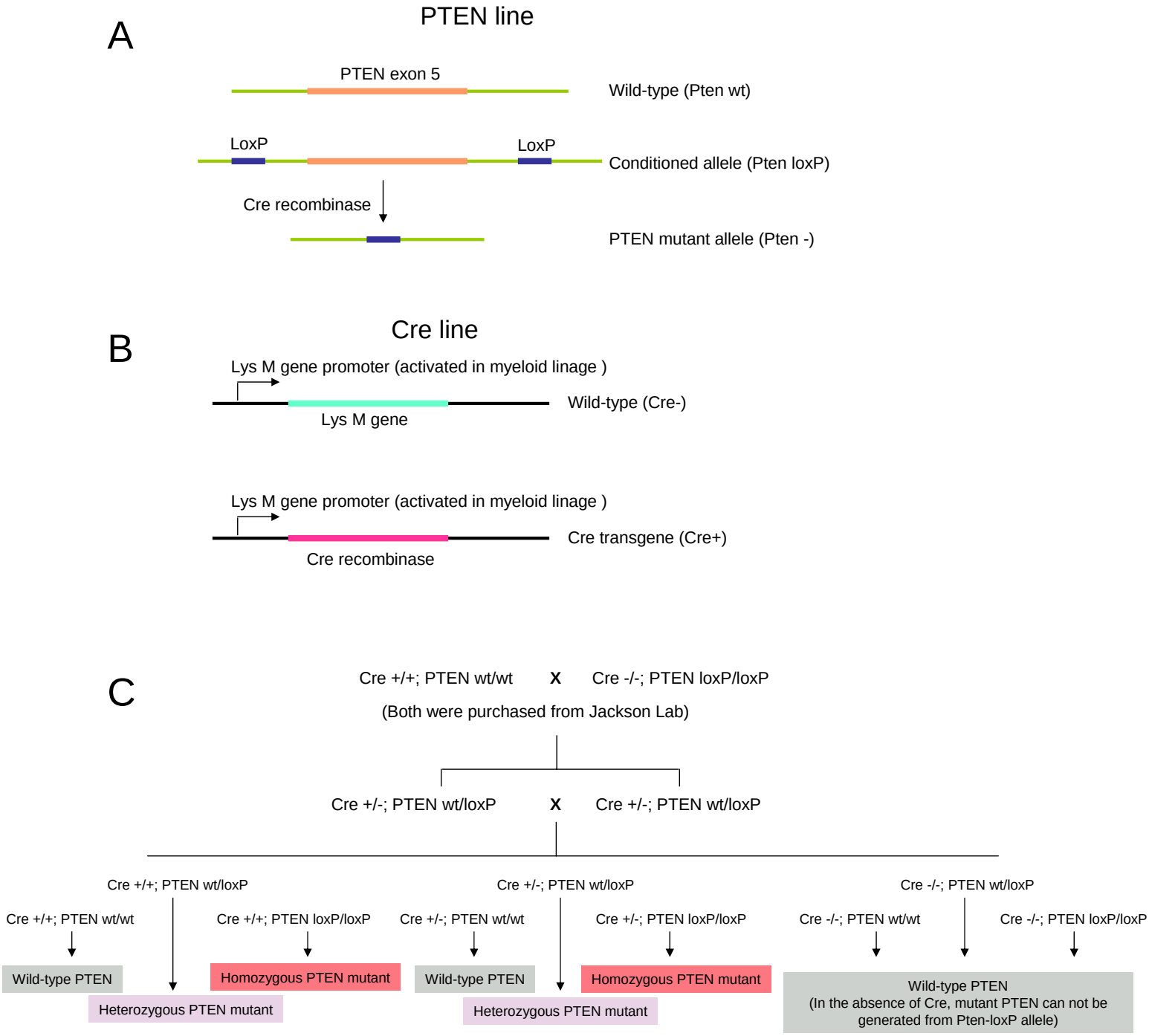
A
PTEN line
PTEN exon 5
Wild-type (Pten wt)
LoxP
LoxP
Conditioned allele (Pten loxP)
Cre recombinase
PTEN mutant allele (Pten -)
B
Cre line
Lys M gene promoter (activated in myeloid linage )
Lys M gene
Wild-type (Cre-)
Lys M gene promoter (activated in myeloid linage )
Cre recombinase
Cre transgene (Cre+)
C
Cre +/+; PTEN wt/wt
X
Cre -/-; PTEN loxP/loxP
(Both were purchased from Jackson Lab)
Cre +/-; PTEN wt/loxP
X
Cre +/-; PTEN wt/loxP
Cre +/+; PTEN wt/loxP
Cre +/+; PTEN wt/wt
Cre +/+; PTEN loxP/loxP
Wild-type PTEN
Homozygous PTEN mutant
Heterozygous PTEN mutant
Cre +/-; PTEN wt/loxP
Cre +/-; PTEN wt/wt
Cre +/-; PTEN loxP/loxP
Wild-type PTEN
Homozygous PTEN mutant
Heterozygous PTEN mutant
Cre -/-; PTEN wt/loxP
Cre -/-; PTEN wt/wt
Cre -/-; PTEN loxP/loxP
Wild-type PTEN
(In the absence of Cre, mutant PTEN can not be generated from Pten-loxP allele)