

### Supplementary table S1

Primers for constructing shRNA plasmids targeting AhR

Plasmids		Primer sequences
pLKO-shAhR1	F	CCGGCCCACAACAATATAATGTCTTCTCGAGAAGACAT TATATIGTTGTGGGTTTTTG
pLKO-shAhR1	R	AATTCAAAAACCCACAACAATATAATGTCTTCTCGAGA AGACATTATATTGTTGTGGG
pLKO-shAhR2	F	CCGGGCTTCTTTGATGTTGCATTA ACTCGAGTTAATGC AACATCAAAGAAGCTTTTTG
pLKO-shAhR2	R	AATTCAAAAAGCTTCTTTGATGTTGCATTA ACTCGAGT TAATGCAACATCAAAGAAGC

## Supplementary table S2

qPCR Primers for detection of mRNA levels or ChIP-qPCR

Gene	Primer sequences
$\beta$ -actin F	GAGCACAGAGCCTCGCCTTT
$\beta$ -actin R	TCATCATCCATGGTGAGCTGG
AHR F	AAAGAAAGGGAAAGATGG
AHR R	TATGGGACTCGGCACAAT
CYP1A1 F	CATGCAGAAGATGGTCAAGG
CYP1A1 R	CCAATCACTGTGTCTAGCTC
AhR ChIP1 F	TAAGCCGCTCAGTATCGC
AhR ChIP1 R	TGGGCCTGCAAATAACAT
AhR ChIP2 F	CACGAAAGTCATCAGTGA
AhR ChIP2 R	TCTTTACAATAGACAGGAATA
AhR ChIP3 F	GGAAACTCCTAGCCTTCA
AhR ChIP3 R	ACAACCAATGGGACTGTAT
AhR ChIP4 F	TTTGCTATGCACGAAGATG
AhR ChIP4 R	CGTGATGACGTAGGACGTAAG
AhR ChIP5 F	GCGTCCTTACGTCCTACGTC
AhR ChIP5 R	TCCATTCCGTCTTCCTTGAG
AhR ChIP6 F	GGGGGTGCTCCTGCTATT
AhR ChIP6 R	GCACGCTCTCGGAACAGA
AhR ChIP7 F	GTCCCGTCGACGCTCTGT
AhR ChIP7 R	AGCTTCCGTTTCGGCTACAC
AhR ChIP8 F	ACCGCCAGCTCAGAACAG
AhR ChIP8 R	CCTAAATCCAGGGTGCTTCC