

Generation of a highly efficient and tissue-specific tryptophan hydroxylase 1 knockout mouse model

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Supplementary Table

Supplementary Table S1. Sequence of the primers used for genotyping and quantitative RT-PCR

Name	Sequence
Tph1 forward	TTCTGACCTGGACTTCTGCG
Tph1 reverse	GGGGTCCCATGTTTGTAGT
36B4 forward	TCCAGGCTTTGGGCATCA
36B4 reverse	CTTTATCAGCTGCACATCACTCAGA
CSD-Tph1-F	TCAACATAGCCCTGAGCTCCTTAGC
CSD-neo-F	GGGATCTCATGCTGGAGTTCTTCG
CSD-Tph1-ttR	ATGCAAAGCTCCTACAGTGACAACG
CSD-Tph1-R	CACATTCCTTGCAACTCTGCTACC
Tph1 exon1 forward	GACTCTTTAAACTCCAGTGG
Tph1 exon11 reverse	TCACACACTGGGCCACCTGG

Supplementary Figure

Supplementary Figure S1. Sequence of splicing variant of *Tph1* in *Tph1^{tm1Kry}* GKO mice.

(a) Sequence of *Tph1* transcript of wild type mice and KO transcript of *Tph1^{tm1Kry}* GKO mice.

Red blocks indicate first ATG of transcript. Purple letters indicate exon 1 of *Tph1*. Red letters indicate exon 2 of *Tph1*. Yellow letters indicate exon 3 of *Tph1*. Green letters indicate exon 4 of *Tph1*.

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Tph1          GACTCTTTAAACTCCAGTGGCTCTGAGGTGAGTGGGTGAGTGGGATAGCCCCCTCCCTGGG
Tph1tm1Kry GKO variant 1 GACTCTTTAAACTCCAGTGGCTCTGAGGTGAGTGGGTGAGTGGGATAGCCCCCTCCCTGGG
Tph1tm1Kry GKO variant 2 GACTCTTTAAACTCCAGTGGCTCTGAGGTGAGTGG-----
Tph1tm1Kry GKO variant 3 GACTCTTTAAACTCCAGTGGCTCTGAG-----

Tph1          ACATCGGATCAGAAGACTCCCAGCAAGGACGGGATCAACTTCTAGTAGGAACCAGATTCA
Tph1tm1Kry GKO variant 1 ACATCGGATCAGAAGACTCCCAGCAAGGACGGGATCAACTTCTAGTAGGAACCAG-----
Tph1tm1Kry GKO variant 2 -----
Tph1tm1Kry GKO variant 3 -----

                Start codon
Tph1          CCATGATTGAAGACAACAAGGAGAACAAGAGAACAAGACCATTCTCCGAAAGAGGGA
Tph1tm1Kry GKO variant 1 -----
Tph1tm1Kry GKO variant 2 -----
Tph1tm1Kry GKO variant 3 -----

Tph1          -----
Tph1tm1Kry GKO variant 1 -----
Tph1tm1Kry GKO variant 2 -----
Tph1tm1Kry GKO variant 3 -----

Tph1          TCTTCCAGGAGAATCATGTGAGCCTGTTACACATCGAGTCCCGAAATCAAAGCAAAGAA
Tph1tm1Kry GKO variant 1 -----
Tph1tm1Kry GKO variant 2 -----
Tph1tm1Kry GKO variant 3 -----

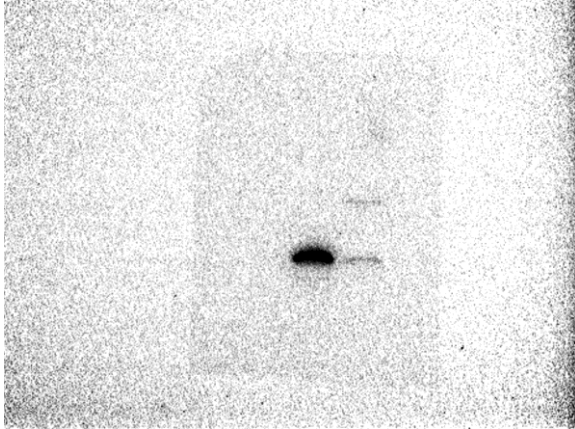
Tph1          ATTCAGAATTTGAGATATTTGTTGACTGCGACATCAGCCGAGAACAGTTGAATGACATCT
Tph1tm1Kry GKO variant 1 -----
Tph1tm1Kry GKO variant 2 -----
Tph1tm1Kry GKO variant 3 -----

Tph1          TCCCCCTGCTGAAGTCGCACGCCACCGTCTCTCGGTGGACTCGCCCCGATCAGCTCACTG
Tph1tm1Kry GKO variant 1 -----
Tph1tm1Kry GKO variant 2 -----
Tph1tm1Kry GKO variant 3 -----

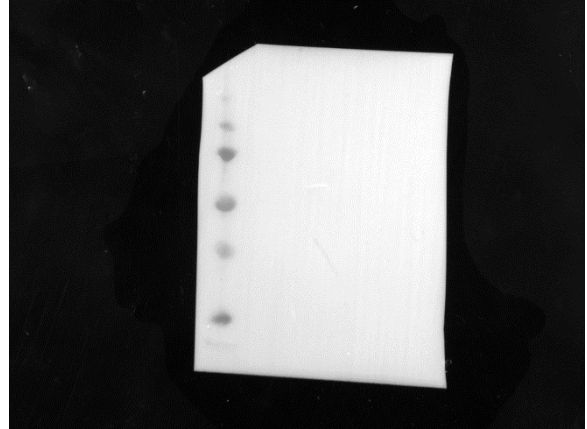
Tph1          CGAAGGAAGACGTTATGGAGACTGTCCCTTGGTTTCCAAAGAAGATTTCTGACCTGGACT
Tph1tm1Kry GKO variant 1 -----TTATCGAGACTGTCCCTTGGTTTCCAAAGAAGATTTCTGACCTGGACT
Tph1tm1Kry GKO variant 2 -----TTATCGAGACTGTCCCTTGGTTTCCAAAGAAGATTTCTGACCTGGACT
Tph1tm1Kry GKO variant 3 -----TTATCGAGACTGTCCCTTGGTTTCCAAAGAAGATTTCTGACCTGGACT
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Supplementary Figure S2. Images of the original western blot in Figure 1g. (a) Full scanned chemiluminescence image. **(b)** Image of membrane with molecular weight markers. **(c)** Image merged with protein bands and molecular weight markers.

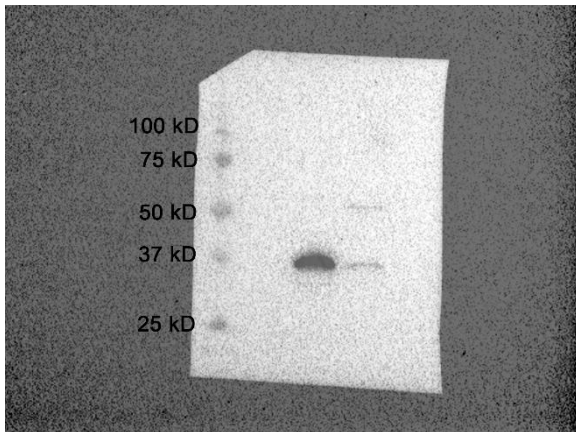
a



b

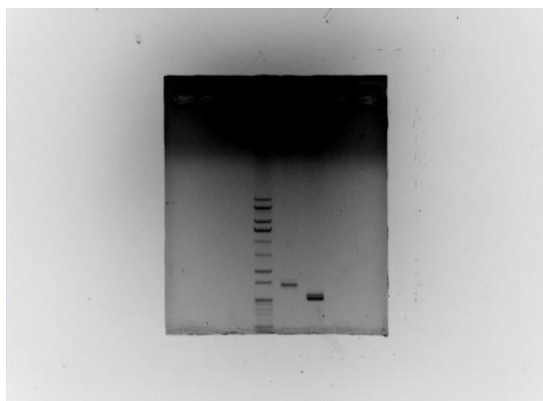


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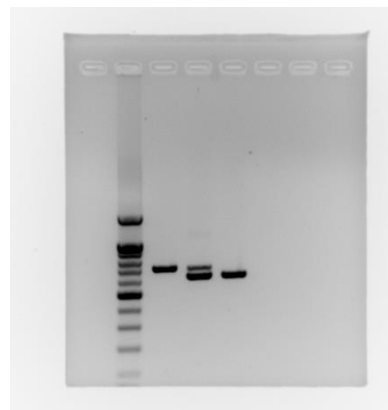


Supplementary Figure S3. Images of original gels in Figure 1 and 2. Full scanned image of Figure 1f (a), left panel of Figure 2b (b), right panel of Figure 2b (c), and Figure 2c (d).

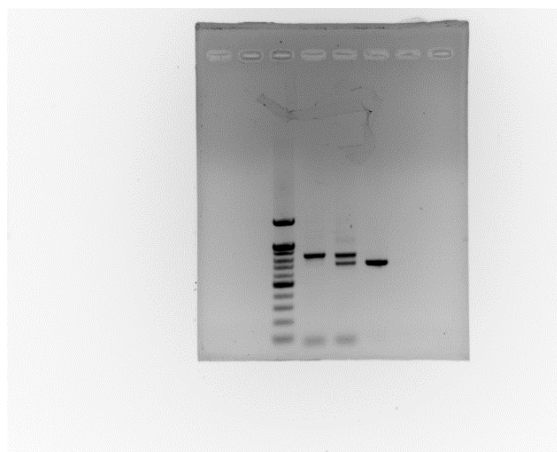
a



b



c



d

