

TrkBneo ID 188

TrkB alleles:

WT trkB

trkBneo (a trkB null allele, both full-length and truncated trkB proteins are removed)

fBZ (a floxed trkB allele with a tau-lacZ reporter gene)

PCR primers:

trkb-n2: ATG TCG CCC TGG CTG AAG TG

trkb-c8: ACT GAC ATC CGT AAG CCA GT

pgk3-1: GGT TCT AAG TAC TGT GGT TTC C

trkb-c7: GAT GAT TTC TAG CCT TTT CTG G

trkb-n2 and trkb-c8 will amplify a 369 bp product from the WT trkB allele.

trkb-c8 and pgk3-1 will amplify a 179 bp product from the trkBneo allele

trkb-n2 and trkb-c7 will amplify a 245 bp product from the fBZ allele

PCR conditions:

PCR mixture (25 microliter)

2.5 µl 10X PCR buffer

1.0 µl dNTPs, each at 2.5 mM

1.0 µl PCR primers (each at 25 µM)

1.0 µl tail DNA

0.15 µl Taq DNA polymerase (5 units per µl)

Add water to 25 µl

PCR cycles

1 cycle at 94 C for 3 min

40 cycles at 94 C for 1 min, 65 C for 1.5 min, and 72 C for 1.5 min

1 cycle at 72 C for 7 min

reference: Xu B, Gottschalk W, Chow A, Wilson RI, Schnell E, Zang K, Wang D, Nicoll RA, Lu B, Reichardt LF. The role of brain-derived neurotrophic factor receptors in the mature hippocampus: modulation of long-term potentiation through a presynaptic mechanism involving TrkB.

J Neurosci. 2000 Sep 15;20(18):6888-97.

PMID: 10995833 [PubMed - indexed for MEDLINE]