

α 2- nAChR subunit null mutation from Dr Jim Boulter

On C57Bl6 background (10 generations)

Reference: Whiteaker P, Wilking JA, Brown RW, Brennan RJ, Collins AC, Lindstrom JM, Boulter J. (2009) Acta Pharmacol Sin. Pharmacological and immunochemical characterization of alpha2* nicotinic acetylcholine receptors (nAChRs) in mouse brain Jun;30(6):795-804.

α 2 PCR Protocol

Volume of Reagent	Reagent
27.0 μ L	Molecular Grade Water
5.0 μ L	10X PCR Buffer
2.0 μ L	MgCl ₂ (25mM)
10.0 μ L	Q Solution
1.0 μ L	dNTP Mix (10mM each dNTP)
1.25 μ L	A213 primer (20 uM)
1.25 μ L	A216 primer (20 uM)
0.5 μ L	Hot Star Taq
2.0 uL	Genomic DNA
50.0 μL Total Volume	(All reagents from Qiagen, primers from Sigma Genosys)

Thermocycler Program

Updated: 4/15/05

95 hold 15 min
55 hold 1 min
72 hold 2 min
95 30 sec
55 1 min
72 2 min } 33 cycles
95 hold 30 sec
55 hold 5 min
72 hold 10 min
4 hold forever

Band Sizes: +/+ 1042 bp
 -/- 1332 bp
 +/- 1042 bp & 1332 bp

Primer Sequences:

A216- 5'CTAAATGCACAGAGTACAGGGAGT 3'
A213- 5' GTAGAACACGAGCACGGTGAGGCA 3'