



ChIP-Chip analysis using GenomePlex-amplified Genomic DNA

Protein cross-linked with PC12 cell (rat) genomic DNA was isolated by immunoprecipitation, amplified using the GenomePlex [WGA2](#) kits, reamplified with GenomePlex [WGA3](#), and subsequently labeled using the Nimblegen Dual-Color labeling kit. Labeled DNA target was applied to Nimblegen 3 x 720K ChIP-chip arrays. Each condition tested (described on the left of each panel) is represented by elution peaks (top line, orange/red bars, provided by the collaborator), probe data (center, green), and derivatized probe data (lower line, blue). Biological replicates representing "wild-type" animals treated with Drug A indicate a DNA-binding protein associated with the promoter region of a chromosome 1 transcript. Specific DNA-binding is also observed at the same locus for the mutant animal treated with Drug B, but not in the case of Drug A treatment. An "IgG" control (addition of peptide from which antibody was prepared) and a no antibody "Control" show no signal. Data was provided by Simon Melov, PhD, Associate Professor and Director of the Genomics Core, the Buck Institute for Age Research, Novato, CA. ChIP-chip data analysis was performed by Ken Heuermann, Senior Scientist, Sigma-Aldrich using Nimblegen SignalMap 1.9.0.05 microarray analysis software. (Critical identifiers have been withheld to protect the ongoing research interests of the collaborator.)