








| Transcription Factor | Motif | Motif Fold Enrichment | Predicted Regulatory Function | Function Fold Enrichment (enhancers with motif compared to all enhancers) |
|----------------------|---|-----------------------|---|---|
| Neurod family |  | 2.39 | Notch signaling pathway | 1.70 |
| Lhx / Lmx family |  | 2.42 | negative regulation of neuron apoptosis | 1.56 |
| Nfi family dimer |  | 4.14 | cell surface proteins | 1.96 |
| Rfx family dimer |  | 3.33 | protein kinase activity | 2.44 |
| Ctcf |  | 1.68 | Alzheimer disease presenilin pathway | 1.69 |
| Novel Nfi dimer |  | 2.06 | - | - |
| Novel Hox dimer |  | 2.32 | autism spectrum disease | 2.15 |

B

Diagram illustrating the Rbpj-mediated gene switching mechanism. The top part shows the Rbpj motif (cGTGcGAA) and the Rbpj protein binding to it. The bottom part shows the Rbpj protein binding to a candidate enhancer (ChIP-seq peak) between Gene A and Gene B, switching Gene A OFF and Gene B ON.

predicted Rbpj targets in Notch signaling

