

Table S3. Dlx-binding motifs from the literature

Dlx binding motif	Source of the motif; tissue in which the cis-element is active	Evidence for direct Dlx binding	Reference
(A/C/G)TAATT(G/A)(C/G)	Synthetic oligonucleotides	EMSA (SELEX)	(Feledy et al., 1999)
CTAATTGA GTAATTAT	Wnt1 enhancer; brain	DNase I foot printing	(Iler et al., 1995)
ATAATTAG ATAATTAC	Dlx5/6 enhancer; brain and branchial arch	EMSA, ChIP	(Zerucha et al., 2000; Zhou et al., 2004)
ATAATTCAG	Hand2; branchial arch	EMSA	(Charite et al., 2001)
GTAATTCG ATAATAAT TTAATTTC	Runx2 promoter; bone	EMSA	(Lee et al., 2005)
ATAATTAT	Nrp2 promoter; brain	EMSA, ChIP	(Le et al., 2007)
ATAATTAC GTAATTAT	Dlx1/2 enhancer; brain	EMSA	(Poitras et al., 2007)
GTAATTAC CTAATGAA	Trkb promoter; eye	EMSA, ChIP	(De Melo et al., 2008)

ChIP, chromatin immunoprecipitation; EMSA, electrophoretic mobility shift assay; SELEX, systematic evolution of ligands by exponential enrichment.

References

- de Melo, J., Zhou, Q.-P., Zhang, Q., Zhang, S., Fonseca, M., Wigle, J. T. and Eisenstat, D. D. (2008). Dlx2 homeobox gene transcriptional regulation of Trkb neurotrophin receptor expression during mouse retinal development. *Nucleic Acids Res.* **36**, 872-884.
- Iler, N., Rowitch, D. H., Echelard, Y., McMahon, A. P. and Abate-Shen, C. (1995). A single homeodomain binding site restricts spatial expression of Wnt-1 in the developing brain. *Mech. Dev.* **53**, 87-96.
- Le, T. N., Du, G., Fonseca, M., Zhou, Q.-P., Wigle, J. T. and Eisenstat, D. D. (2007). Dlx homeobox genes promote cortical interneuron migration from the basal forebrain by direct repression of the semaphorin receptor neuropilin-2. *J. Biol. Chem.* **282**, 19071-19081.
- Lee, M.-H., Kim, Y.-J., Yoon, W.-J., Kim, J.-I., Kim, B.-G., Hwang, Y.-S., Wozney, J. M., Chi, X.-Z., Bae, S.-C., Choi, K.-Y. et al. (2005). Dlx5 specifically regulates Runx2 Type II expression by binding to homeodomain-response elements in the Runx2 distal promoter. *J. Biol. Chem.* **280**, 35579-35587.
- Poitras, L., Ghanem, N., Hatch, G. and Ekker, M. (2007). The proneural determinant MASH1 regulates forebrain Dlx1/2 expression through the l12b intergenic enhancer. *Development* **134**, 1755-1765.
- Zerucha, T., Stuhmer, T., Hatch, G., Park, B. K., Long, Q., Yu, G., Gambarotta, A., Schultz, J. R., Rubenstein, J. R. and Ekker, M. (2000). A highly conserved enhancer in the Dlx5/Dlx6 intergenic region is the site of cross-regulatory interactions between Dlx genes in the embryonic forebrain. *J. Neurosci.* **20**, 709-721.
- Zhou, Q.-P., Le, T. N., Qiu, X., Spencer, V., de Melo, J., Du, G., Plews, M., Fonseca, M., Sun, J. M., Davie, J. R. and Eisenstat, D. D. (2004). Identification of a direct Dlx homeodomain target in the developing mouse forebrain and retina by optimization of chromatin immunoprecipitation. *Nucleic Acids Res.* **32**, 884-892.