

Table S1: Directionality of 4C-seq on 5' and 3' sides

**A. Analysed region**

Mouse

	Analysed region	Excluded region around <i>Hox</i> cluster
<b><i>HoxA</i></b>	chr6:50,560,000-53,720,000	chr6:52,098,978-52,227,163
<b><i>HoxD</i></b>	chr2:73,400,000-75,960,000	chr2:74,484,971-74,607,492

Zebrafish

	Analysed region	Excluded region around <i>Hox</i> cluster
<b><i>HoxAa</i></b>	chr19:18,923,398-20,473,964*	chr19:19,163,605-19,259,166
<b><i>HoxAb</i></b>	chr16:22,639,378-23,326,921	chr16:22,965,776-23,034,186
<b><i>HoxDa</i></b>	chr9:1,487,878-2,469,878	chr9:1,923,143-1,996,717

\* additionally, the incorrectly mapped region chr19:19,339,227-20,079,754 has been excluded see **Figure S4**.

**B. Distribution of signal in 5' and 3' sides**

Mouse

	Autopod		Zeugopod		Brain	
	3' signal	5' signal	3' signal	5' signal	3' signal	5' signal
<b><i>Hoxa4</i></b>	469,563 (72.1%)	181,849 (27.9%)	461,734 (71.1%)	187,457 (28.9%)	418,224 (63.8%)	236,881 (36.2%)
<b><i>Hoxa9</i></b>	341,659 (62.3%)	207,184 (37.7%)	430,871 (73.6%)	154,556 (26.4%)	432,454 (67.6%)	206,802 (32.4%)
<b><i>Hoxa11</i></b>	277,989 (47.2%)	311,319 (52.8%)	366,920 (61.4%)	230,237 (38.6%)	352,240 (54.8%)	290,762 (45.2%)
<b><i>Hoxa13</i></b>	201,363 (33.7%)	396,172 (66.3%)	258,587 (36.6%)	448,876 (63.4%)	304,885 (45.5%)	365,571 (54.5%)

	Autopod		Zeugopod		Brain	
	5' signal	3' signal	5' signal	3' signal	5' signal	3' signal
<b><i>Hoxd4</i></b>	130,255 (17.3%)	622,657 (82.7%)	134,289 (17.6%)	628,719 (82.4%)	218,754 (34.0%)	424,405 (66.0%)
<b><i>Hoxd11</i></b>	274,863 (51.6%)	257,492 (48.4%)	183,077 (30.4%)	418,402 (69.6%)	250,553 (45.7%)	297,563 (54.3%)
<b><i>Hoxd13</i></b>	432,852 (73.5%)	155,735 (26.5%)	436,234 (63.1%)	255,335 (36.9%)	367,937 (60.4%)	240,900 (39.6%)

Zebrafish

	<i>hoxa4a</i>		<i>hoxa9a</i>		<i>Hoxa11a</i>		<i>hoxa13a</i>	
	5' signal	3' signal	5' signal	3' signal	5' signal	3' signal	5' signal	3' signal
<b><i>HoxAa</i></b>	25,468 (26.6%)	70,220 (73.4%)	40,382 (36.4%)	70,452 (63.6%)	51,685 (49.6%)	52,557 (50.4%)	95,967 (66.9%)	47,455 (33.1%)

	<i>hoxa2b</i>		<i>hoxa11b</i>		<i>hoxa13b</i>	
	5' signal	3' signal	5' signal	3' signal	5' signal	3' signal
<b><i>HoxAb</i></b>	46,237 (43.4%)	60,381 (56.6%)	73,275 (63.8%)	41,553 (36.2%)	93,053 (78.9%)	24,928 (21.1%)

	<i>hoxd4a</i>		<i>hoxd10a</i>		<i>hoxd11a</i>		<i>hoxd13a</i>	
	3' signal	5' signal	3' signal	5' signal	3' signal	5' signal	3' signal	5' signal
<b><i>HoxDa</i></b>	118,791 (74.4%)	40,811 (25.6%)	90,028 (63.9%)	50,941 (36.1%)	77,155 (55.1%)	62,809 (44.9%)	60,037 (34.5%)	114,230 (65.5%)