## Appendix 2

The following table shows details of the sequences used in all analyses. All alignments consisted of just the 60 amino acid homeodomain.

Supplementary Table 1 Sequences used in alignments.					
Species	Abbreviation	Hox	GenBank		
		Orthology	Accession		
Mus musculus	Mmu_HoxA1	Hox1	NM_010449		
Mus musculus	Mmu_HoxB1	Hox1	NM_008266		
Branchiostoma floridae	Bfl_Hox1	Hox1	AB028206		
Chaetopterus variopedatus	Cva_Hox1	Hox1	AF163856		
Nereis virens	Nvi_Hox1	Hox1	AF151663		
Mus musculus	Mmu_HoxA2	Hox2	NM_010451		
Branchiostoma floridae	Bfl_Hox2	Hox2	AB028207		
Mus musculus	Mmu_HoxB2	Hox2	NM_134032		
Chaetopterus variopedatus	Cva_Hox2	Hox2	AF163857		
Archegozetes longisetosus	Alo_pb	Hox2	AF071406		
Mus musculus	Mmu_HoxA3	Нох3	NM_010452		
Mus musculus	Mmu_HoxB3	Нох3	NM_010458		
Branchiostoma floridae	Bfl_Hox3	Нох3	X68045		
Chaetopterus variopedatus	Cva_Hox3	Нох3	AF163858		
Nereis virens	Nvi_Hox3	Нох3	AF151665		
Mus musculus	Mmu_HoxA4	Hox4	NM_008265		
Mus musculus	Mmu_HoxB4	Hox4	NM_010459		
Branchiostoma floridae	Bfl_Hox4	Hox4	AB028208		
Nereis virens	Nvi_Dfd	Hox4	AF151666		
Helobdella triserialis	Htr_Lox18	Hox4	AF137385		
Mus musculus	Mmu_HoxA5	Нох5	NM_010453		

Branchiostoma floridae	Bfl_Hox5	Hox5	Z35145
Mus musculus	Mmu_HoxB5	Hox5	NM_008268
Lingula anatina	Lan_Scr	Hox5	AF144674
Nereis virens	Nvi_Scr	Hox5	AF151667
Helobdella robusta	Hro_Lox2	Hox6/7/8	Z14313
Nereis virens	Nvi_Lox2	Hox6/7/8	AF151668
Nereis virens	Nvi_Lox4	Hox6/7/8	AF151669
Hirudo medicinalis	Hme_Lox4	Hox6/7/8	S79240
Nereis virens	Nvi_Lox5	Hox6/7/8	AF151671
Helobdella robusta	Hro_Lox5	Hox6/7/8	AF004387
Mus musculus	Mmu_HoxA6	Hox6/7/8	NM_010454
Mus musculus	Mmu_HoxB6	Hox6/7/8	NM_008269
Branchiostoma floridae	Bfl_Hox6	Hox6/7/8	Z35146
Mus musculus	Mmu_HoxB7	Hox6/7/8	NM_010460
Mus musculus	Mmu_HoxA7	Hox6/7/8	NM_010455
Branchiostoma floridae	Bfl_Hox7	Hox6/7/8	Z35147
Mus musculus	Mmu_HoxB8	Hox6/7/8	NM_010461
Mus musculus	Mmu_HoxC8	Hox6/7/8	NM_010466
Branchiostoma floridae	Bfl_Hox8	Hox6/7/8	Z35148
Mus musculus	Mmu_HoxA9	Нох9+	NM_010456
Mus musculus	Mmu_HoxB9	Нох9+	NM_008270
Branchiostoma floridae	Bfl_Hox9	Нох9+	Z35149
Lingula anatina	Lan_Post1	Нох9+	AF144679
Nereis virens	Nvi_Post1	Нох9+	AF151672
Mus musculus	Mmu_HoxA10	Hox9+	NM_008263
Mus musculus	Mmu_HoxC10	Hox9+	NM_010462
Branchiostoma floridae	Bfl_Hox10	Hox9+	Z35150
Lingula anatina	Lan_Post2	Hox9+	AF144680
Nereis virens	Nvi_Post2	Hox9+	AF151673

Mus musculus	Mmu_Gsh1	Gsx	NM_008178
Mus musculus	Mmu_Gsh2	Gsx	NM_133256
Branchiostoma floridae	Bfl_Gsx	Gsx	AF052463
Capitella species	Csp_Gsx	Gsx	DQ132894
Mus musculus	Mmu_Xlox	Xlox	NM_008814
Branchiostoma floridae	Bfl_Xlox	Xlox	AF052464
Capitella species	Csp_Xlox	Xlox	DQ102390
Phascolion strombi	Pst_Xlox	Xlox	AF363233
Mus musculus	Mmu_Cdx1	Cdx	NM_009880
Mus musculus	Mmu_Cdx2	Cdx	NM_007673
Capitella species	Csp_Cdx	Cdx	DQ102389
Branchiostoma floridae	Bfl_Cdx	Cdx	AF052465
Nereis virens	Nvi_Cdx	Cdx	AY117546
Mus musculus	Mmu_Evx1	Evx	NM_007966
Mus musculus	Mmu_Evx2	Evx	BC061467
Branchiostoma floridae	Bfl_Evx	Evx	AF374191
Helobdella robusta	Hro_Eve	Evx	AF409098
Theromyzon trizonare	Ttr_Eve	Evx	AY050275