

**Divergence of Conserved Non-Coding Sequences: Rate Estimates and Relative Rate Tests**  
*Günter P. Wagner, Claudia Fried, Sonja J. Prohaska, Peter F. Stadler*

**Table A1:** Phylogenetic Footprints in *HoxA* clusters computed using `tracker`.

Alignment	HfM		PsA		XtA		HsA		MmA		RnA	
<a href="#">1</a>	231	44							68025	44		
<a href="#">2</a>	366	40									9232	40
<a href="#">3</a>	873	34							142281	34		
<a href="#">4</a>	1259	34							75596	34		
<a href="#">5</a>	2484	33									62889	33
<a href="#">6</a>	3115	29							144182	29		
<a href="#">7</a>	3734	81					20391	84			65933	27
<a href="#">8</a>			2900	47					10014	34	34916	24
<a href="#">9</a>					2579	64			15730	77		
<a href="#">10</a>					7946	58			106392	63		
<a href="#">11</a>					8165	33					116	33
<a href="#">12</a>					9609	26	33587	26				
<a href="#">13</a>					9625	23	35628	23				
<a href="#">14</a>					9850	44					5032	44
<a href="#">15</a>					9921	31	41311	31				
<a href="#">16</a>					9982	25			20540	25		
<a href="#">17</a>					12164	36			24872	36		
<a href="#">18</a>					15705	31			109944	31		
<a href="#">19</a>					16088	26					5551	26
<a href="#">20</a>					17967	56					10978	50
<a href="#">21</a>					19856	35	43866	35				
<a href="#">22</a>					20831	23					55851	23
<a href="#">23</a>					21294	24					59587	24
<a href="#">25</a>					24378	28			31461	28		
<a href="#">26</a>					31322	33					22302	33
<a href="#">27</a>					31404	38			129274	38		
<a href="#">29</a>					32365	65			84841	68		
<a href="#">32</a>			5805	37					22516	37		
<a href="#">33</a>			6781	61					26022	62		
<a href="#">34</a>			9491	32	258	32						
<a href="#">35</a>			12096	32							44927	32
<a href="#">36</a>			13087	65					34165	65		
<a href="#">37</a>			15013	24	2116	24						
<a href="#">38</a>			17219	47					70844	45		
<a href="#">39</a>			18089	39	3642	35						
<a href="#">40</a>			21491	38	9223	38						
<a href="#">41</a>			21731	139	31769	48	3222	115	93533	67	49057	60
<a href="#">43</a>			23247	250			4618	248	94182	248	50309	248
<a href="#">44</a>			23498	57			4878	57	94442	57	50569	57
<a href="#">46</a>			24842	165			7024	158	96629	158	52699	158
<a href="#">47</a>			25048	26			7213	26	96818	26	52888	22
<a href="#">48</a>			26090	30			8623	29			54126	33
<a href="#">49</a>			26144	44			8688	43			54196	43
<a href="#">50</a>			29987	229			13112	228	102326	223	58421	223
<a href="#">51</a>			32913	37	5236	37						

<a href="#">52</a>			35561	60			13851	60					
<a href="#">53</a>			43897	61	11838	55							
<a href="#">54</a>	3931	23	44043	23									
<a href="#">55</a>	4642	25							92161	25			
<a href="#">56</a>	5239	44	9524	44									
<a href="#">57</a>	5668	31									13992	31	
<a href="#">58</a>	5901	75					28483	75					
<a href="#">59</a>	5949	23					4134	23					
<a href="#">60</a>	6245	28									93547	28	
<a href="#">61</a>	6474	129			24970	137	45103	138	145167	106	104986	106	
<a href="#">62</a>			45688	67			14823	67					
<a href="#">63</a>			60031	34					126380	34			
<a href="#">64</a>			61992	147	12294	145							
<a href="#">65</a>			62235	21	12530	21							
<a href="#">66</a>			67662	44	13781	44							
<a href="#">67</a>			69213	66							82332	61	
<a href="#">68</a>			69904	31					130576	31			
<a href="#">73</a>			79489	31					142940	31			
<a href="#">74</a>			85023	41							97803	41	
<a href="#">75</a>			87787	37	32162	39							
<a href="#">76</a>			91412	41			31585	41					
<a href="#">77</a>			91590	34			34164	34					
<a href="#">78</a>			91930	33			36430	33					
<a href="#">79</a>			96320	33							98060	33	
<a href="#">80</a>			110121	52							102252	39	
<a href="#">81</a>			118559	37							107131	37	
<a href="#">82</a>	6766	50	123822	41	25250	47	45433	51	145485	30	105297	30	
<a href="#">83</a>	9052	48									34433	48	
<a href="#">84</a>	11912	26	24417	99			6297	99	95907	99	51909	99	
<a href="#">85</a>	12706	53	93728	49									
<a href="#">86</a>	13194	128	128724	124	33573	75	53810	88	153292	73	113151	73	
<a href="#">87</a>					34310	21					40311	21	
<a href="#">88</a>	16120	61	130136	60	35234	35							
<a href="#">89</a>	16196	94	130211	97	35295	81							
<a href="#">90</a>					37258	32	58221	31	157705	26	118137	32	
<a href="#">91</a>					37776	112	58895	113	158410	65	118774	111	
<a href="#">92</a>					37897	12	59019	12					
<a href="#">93</a>			133081	24	38158	23							
<a href="#">94</a>	19132	113	133157	133	38213	145	59469	150	158937	138	119392	144	
<a href="#">95</a>					38424	17			159146	18			
<a href="#">96</a>					38457	32			159187	32			
<a href="#">100</a>					43684	21					119713	21	
<a href="#">101</a>					44767	24	62304	24					
<a href="#">104</a>	27606	116	139822	218	45137	170	68084	219	167782	185	128087	210	
<a href="#">105</a>					49345	11	70485	10					
<a href="#">106</a>					49365	89	70504	83	170137	90	130424	83	
<a href="#">107</a>	29793	160	141653	165	49460	175	70661	173	170296	175	130581	173	
<a href="#">108</a>	34423	80	145837	58			75337	82	174918	66	135211	66	
<a href="#">109</a>					54325	38			175278	41			
<a href="#">110</a>			146188	89	54408	136	75799	140	175411	111	135673	137	

<a href="#">111</a>	35034	85	146436	78	54622	73	76055	66	175616	78	135905	79
<a href="#">112</a>	37278	59			51672	56						
<a href="#">113</a>	39229	58			52449	61						
<a href="#">116</a>			148412	59					177205	46	137494	59
<a href="#">117</a>					54706	37	76127	37	175703	35	135993	27
<a href="#">118</a>			149568	12	59484	34	81560	32	181143	29	141479	29
<a href="#">119</a>	43120	116	149591	119	59530	119	81610	115	181192	114	141528	113
<a href="#">120</a>					62146	44			184539	36	144812	44
<a href="#">121</a>	46400	43			62464	123	85233	124	184849	125	145127	124
<a href="#">122</a>	46546	26					85435	24	185064	14	145341	14
<a href="#">123</a>	46579	213	153511	215	62728	187	85477	189	185094	190	145371	190
<a href="#">124</a>	47540	118	154149	105	63324	114	86411	116	186028	113	146438	111
<a href="#">125</a>	48333	30			64972	33	87347	39	186914	32	147346	43
<a href="#">126</a>	52962	356	156742	224	67251	352	90123	382	189661	405	150190	435
<a href="#">127</a>					69151	38	92727	41				
<a href="#">128</a>					69813	70	93441	63	193000	65	153670	65
<a href="#">129</a>	56958	94			70634	93	94193	53	193747	56	154449	51
<a href="#">130</a>			158475	126	69206	150	92785	160	192371	132	153047	115
<a href="#">131</a>	57228	226	160242	226	70976	214	94466	223	194005	209	154710	210
<a href="#">132</a>	57682	31					94837	31	194376	30	155081	30
<a href="#">133</a>	59398	50			72129	50						
<a href="#">135</a>			160958	31	71368	31						
<a href="#">137</a>			165175	39							155777	39
<a href="#">138</a>					77609	11					163615	10
<a href="#">139</a>					77684	58	103560	59	203028	45	163687	45
<a href="#">143</a>			167384	26							156296	26
<a href="#">145</a>	62147	62			73862	61	99258	54	198607	54	159294	54
<a href="#">146</a>	62226	107	162086	79	73938	113	99320	115	198669	115	159356	115
<a href="#">147</a>	64887	42	161405	42								
<a href="#">148</a>	66397	22	165572	22								
<a href="#">149</a>	66442	263	165611	263	77306	238	103200	221	202656	272	163315	272
<a href="#">150</a>	66915	32			77774	37	103652	40	203109	40	163762	32
<a href="#">151</a>	67795	54									164177	54
<a href="#">152</a>	71706	222	168484	214	82096	221	108003	222	207337	222	168019	222
<a href="#">153</a>	74307	24							211362	25		
<a href="#">154</a>	74397	30	170824	32	84875	91	111936	92	211402	86	172811	83
<a href="#">155</a>	74445	59	170872	50	84995	32	112037	42	211502	46	172907	47
<a href="#">156</a>	74514	273	170948	253	85051	265	112101	272	211568	271	172971	277
<a href="#">157</a>	76119	11					114171	11	213634	12	175239	13
<a href="#">158</a>	76137	66					114197	56	213664	57	175264	66
<a href="#">159</a>	76215	286	172865	258	86966	149	114264	307	213732	317	175341	326
<a href="#">160</a>	76530	47	173138	72			114585	62	214063	72	175681	72
<a href="#">161</a>	76627	83	173231	125			114670	123	214153	123	175771	123
<a href="#">162</a>	76740	88	173382	82			114894	44	214367	36	175994	36
<a href="#">163</a>	77370	22	173881	21								
<a href="#">164</a>	77534	357	173989	398	87858	354	115437	480	214966	406	176591	408
<a href="#">165</a>	78765	105			88843	100	116698	106	216103	91	177704	72
<a href="#">167</a>					90854	30	119227	31	218555	16	180183	24
<a href="#">168</a>	81937	76	175409	135	90902	178	119276	176	218593	174	180226	160
<a href="#">169</a>					91223	34					180552	34

<a href="#">170</a>	82436	333	175886	126	91421	297	119799	314	219121	306	180759	299
<a href="#">171</a>	84822	235	177482	244	92529	238	121972	260	221207	257	182870	255
<a href="#">172</a>	85596	98			93186	122	122775	120	222014	115	183669	123
<a href="#">174</a>					93334	27	122948	26				
<a href="#">175</a>	87651	77			95930	72						
<a href="#">176</a>	87744	115	179530	91	96017	124	125173	76	224417	72		
<a href="#">177</a>	89930	34									179729	34
<a href="#">178</a>	91064	132					128822	129	227852	127	188875	128
<a href="#">179</a>	91507	81			98983	78	129461	79	228476	56	189435	82
<a href="#">180</a>	91596	49			99069	50	129556	44	228568	46	189542	43
<a href="#">181</a>	92853	91	182503	59	100686	45	131248	89	230361	77	191356	80
<a href="#">182</a>	93216	84			101061	16	131592	77	230687	58	191691	66
<a href="#">183</a>	93311	53			101120	28	131680	42	230776	44	191788	54
<a href="#">184</a>	93372	115			101166	100	131766	85	230871	85	191901	58
<a href="#">185</a>			183073	42					235777	42		
<a href="#">187</a>			186107	63			129630	63				
<a href="#">188</a>	98246	67	186333	129			136878	140			196255	79
<a href="#">189</a>	98409	129	186496	57	105157	125	137066	111	235519	94	196402	105
<a href="#">190</a>	98855	188	186937	118	105708	205	137513	170	235971	154	196861	166
<a href="#">192</a>	99105	106	187224	63	105998	99	137817	80	236285	80	197166	81
<a href="#">193</a>	100021	120	187870	109	106544	66						
<a href="#">194</a>	100163	12	188003	11								
<a href="#">195</a>					107831	15			238878	15	199808	15
<a href="#">196</a>	101931	276	189075	65	107890	211	140542	277	238940	219	199866	273
<a href="#">197</a>	102591	71	189635	73	108768	57	141730	37	239960	38	200883	38
<a href="#">198</a>	102687	133	189732	133	108978	129	141955	104	240188	85	201110	85
<a href="#">199</a>	102844	14	189892	14								
<a href="#">200</a>	102907	280	189952	253	109290	181	142331	191	240515	189	201409	189
<a href="#">201</a>	105041	196	191239	126	110494	213	144051	217	242219	222	203067	204
<a href="#">202</a>	106120	237	192001	208	111798	221	145095	245	243298	228	204178	228
<a href="#">203</a>			196002	67			148228	70				
<a href="#">204</a>	109870	373	196379	69	117922	364	148351	349	246505	376	207392	364
<a href="#">206</a>			196544	24					246949	21	207814	30
<a href="#">207</a>	110397	49	196625	49			148901	40	247019	69	207896	66
<a href="#">208</a>	112894	117	198558	160	120693	212	151182	178	249198	203	210054	211
<a href="#">209</a>	113355	59	199175	64								
<a href="#">210</a>	113534	69	199366	75								
<a href="#">211</a>	113619	198	199544	137	121931	215	152783	156	250845	159	211655	163
<a href="#">212</a>	113929	262	199795	267	122217	286	153128	268	251161	266	211973	266
<a href="#">213</a>	114200	23	200079	23								
<a href="#">214</a>					124242	35	155503	29	253546	33	214345	35
<a href="#">215</a>	116088	86	202095	55	124286	119	155542	110	253591	109	214391	86
<a href="#">216</a>	116229	30					155683	30				
<a href="#">217</a>	116301	11					155747	11				
<a href="#">218</a>	117307	243	203123	220	125011	266	156872	209	254927	208	215701	208
<a href="#">219</a>	117798	31	203874	31								
<a href="#">220</a>					134269	26			257655	26		
<a href="#">221</a>	119948	59	205344	72	134304	66	159804	71	257692	72	218477	73
<a href="#">223</a>	120009	138	205436	103	134375	151	159879	190	257771	160	218556	185
<a href="#">224</a>	121736	18					161979	16				

<a href="#">225</a>	121808	89					162032	75	259924	82		
<a href="#">226</a>	122218	92	207648	59	136483	37	162406	100	260339	74	221105	78
<a href="#">227</a>	122333	42	207715	26	136555	26	162525	42	260438	46	221200	28
<a href="#">228</a>	122397	12					162592	12	260506	12	221266	11
<a href="#">229</a>	122410	90	207787	75			162614	66	260533	47	221292	50
<a href="#">230</a>	122765	106			136838	128	162899	121	260874	124	221632	128
<a href="#">231</a>	123040	27			142984	27						
<a href="#">232</a>	123177	27	208449	27								
<a href="#">233</a>	124057	25							285893	25		
<a href="#">234</a>			214361	46					271060	46		
<a href="#">241</a>			234109	29					295339	29		
<a href="#">242</a>			234344	30							253589	30
<a href="#">243</a>			234693	30					295535	30		
<a href="#">244</a>			237072	36							262429	36
<a href="#">245</a>			237732	33					300036	33		
<a href="#">246</a>			244785	27					303501	27		
<a href="#">247</a>	124150	27	244948	27								
<a href="#">248</a>	124412	71	208863	115	138149	246			262589	247	223340	257
<a href="#">250</a>			249737	45							279407	42
<a href="#">251</a>			251939	28					312732	28		
<a href="#">252</a>			255647	25							281230	25
<a href="#">253</a>			256332	73					312758	69		
<a href="#">254</a>			258056	39					351621	39		
<a href="#">255</a>					144475	49					225531	52
<a href="#">256</a>					145252	28					226437	28
<a href="#">257</a>					146688	51					237894	51
<a href="#">258</a>					149181	36			300498	33		
<a href="#">259</a>					149359	30			341118	30		
<a href="#">260</a>					149759	50			341257	47		