

**Table S3. Accession numbers of Pax6 related mRNA, ESTs and genomic sequences for species included in the comparative analysis in Figure 4. NA: no Pax6-related sequences are available in public databases**

<b>Species</b>	<b>mRNA</b>	<b>ESTs</b> (total available ESTs)	<b>Genomic records</b>
<b>Tetrapoda</b>			
<i>Homo sapiens</i>	AB593092- AB593094, M77844	BY795116.2, DA571138.1	ENSG00000007372
<b>Coelocanth</b>			
<i>Latimeria chalumnae</i>	NA	NA (0)	NW_005819101
<b>Ray-finned fishes</b>			
<i>Danio rerio</i> Pax6.1a	X63183, X61389, BC076068	CN318631, FP158091	NC_007136.6
<i>Danio rerio</i> Pax6.1b	BC076068, AF061252	CT604580, CK396395	NC_007118.6
<i>Oryzias latipes</i> Pax6.1	AJ000938	DK094078, AM316636	NW_004087942
<i>Oryzias latipes</i> Pax6.3	NA	BJ013007, AM298948	NC_019864.1
<b>Chondrichthyes</b>			
<i>Callorhynchus milii</i>	NA	NA (109,965)	NW_006890061.1
<i>Leucoraja erinacea</i> *	NA	NA (31,167)	AESE010059308, AESE010129024.1
<b>Hyperoartia</b>			
<i>Petromyzon marinus</i>	NA	NA (120,731)	AEFG01058654.1
<i>Lethenteron camtschaticum</i>	AB061220	NA (8,788)	APJL01012232, APJL01012235, APJL01012244, APJL01012245, APJL01012247, APJL01012248, APJL01047766, APJL01047767, APJL01047768, APJL01115859, APJL01166332, APJL01166741
<i>Lampetra fluviatilis</i>	AF384973 (partial)	NA (6)	NA
<b>Hyperotreti</b>			
<i>Eptatretus bergeri</i>	FR720087, AB270704	NA (27,909)	NA
<b>Tunicata</b>			
<i>Ciona intestinalis</i>	NM_001032469	BW222431, BW415232 BW087598, FF702282 BW360858	NW_004190331.2

<b>Species</b>	<b>mRNA</b>	<b>ESTs</b> (total available ESTs)	<b>Genomic records</b>
<i>Ciona savignyi</i>	NA	NA (84,302)	AACT01018212.1
<b>Cephalochordata</b>			
<i>Branchiostoma floridae</i> #	AJ223440, AJ223441, AJ223442, AJ223443, AJ223444	NA (334,502)	NW_003101385
<i>Branchiostoma belcheri</i>	NA	NA (24,836)	DQ991503
<i>Branchiostoma lanceolatum</i>	NA	NA (0)	lcl xpSc0039676
<b>Hemichordata</b>			
<i>Saccoglossus kowalevskii</i>	AY313154	FF491918, F449641, FF479505, FF479254	NW_003122423
<b>Echinodermata</b>			
<i>Lytechinus variegatus</i> *	NA	NA (1)	AGCV02304654
<i>Metacrinus rotundus</i>	GU812278	NA (0)	NA
<i>Paracentrotus lividus</i>	U14621	NA (140,897)	NA
<i>Patiria miniata</i> *	HQ128717	NA (1,249)	AKZP01060555
<i>Strongylocentrotus droebachiensis</i>	DQ230536	NA (0)	NA
<i>Strongylocentrotus intermedius</i>	KF733999	NA (66)	NA
<i>Strongylocentrotus purpuratus</i> #	NA	NA (141,833)	NW_011994489.1, AAGJ05116494
<b>Protostomia</b>			
<i>Drosophila melanogaster</i>	X79493, BT025949	EL874785-EL874786, EL874913, EL875029	NC_004353.4
<i>Caenorhabditis elegans</i>	U31537, U29145, U29184	CB391511, AU205038, CB391537, AU208824, CB391547, BJ113838	NC_003284.9

# Genome annotation concerning *Pax6* genes was re-evaluated

\* Species for which genomic scaffolds were analyzed and annotated *de novo*