

Table S2. Summary of the results from analysing *pax2/8* CNEs using either the co-injection assay or Tol2 cloning

CNE ID	Gene	Expression	
		Co-injection	Tol2
CRCNE0000063-4	<i>pax2.1</i>	CNS , eye, cardiovascular, blood, muscle, pronephric region	CNS, eye, ear, cardiovascular, blood, muscle, pronephric region
CRCNE00000133	<i>pax2.2</i>	Hindbrain, spinal cord, telencephalon, eye, cardiovascular, muscle	Hindbrain, spinal cord, telencephalon, eye, cardiovascular, muscle
CRCNE00000735	<i>pax8</i>	CNS	CNS, eye, ear
CRCNE00000100	<i>pax2.1</i>	No expression out of 235 screened	No expression on day 2, 10/292 with expression in heart and/or skin on day 3
CRCNE00000175	<i>pax2.2</i>	No expression out of 244 screened	No expression out of 525 screened

CONDOR identifiers are given in the first column followed by the gene name and description of expression. For GFP-positive elements, we selected CNEs with shared sequence homology to both *pax2* co-orthologues and *pax8* (the first three elements listed here). As illustrated in Fig. S5, expression is highly similar. None of the expression domains described for the co-injection assay differed from those observed in the Tol2 results. The other two elements showed no evidence of enhancer activity using the co-injection assay. This was corroborated by the Tol2 system, with only a low level of expression on day 3 in the case of element CRCNE00000175. This may be due to the higher level of transient expression (both specific and ectopic) usually observed with the Tol2 method.