Supplementary Table 1.
p-values for each experimental condition as determined by two-tailed T-test.

Figure 3F	Standard MO + *β-gal*	Dyrk1a MO + *β-gal*	Dyrk1a MO + WT *DYRK1A*	Dyrk1a MO + *DYRK1A R205**
Xenopus embryo (n)	166	125	140	94
Standard MO + *β-gal*	1	3.42E-08	0.0008	5.98E-07
Dyrk1a MO + *β-gal*		1	0.0051	0.5867
Dyrk1a MO + WT *DYRK1A*			1	0.0055
Dyrk1a MO + *DYRK1A R205**				1

Supplementary Table 2.
p-values for each experimental condition as determined by two-tailed T-test.

Figure 3G	Standard MO + *β-gal*	Dyrk1a MO + *β-gal*	Dyrk1a MO + WT *DYRK1A*	Dyrk1a MO + *DYRK1A L245R*
Xenopus embryo (n)	75	80	57	74
Standard MO + *β-gal*	1	0.0006	0.1449	0.0003
Dyrk1a MO + *β-gal*		1	0.0649	0.7735
Dyrk1a MO + WT *DYRK1A*			1	0.0457
Dyrk1a MO + *DYRK1A L245R*				1

Supplementary Table 3.
Xenopus embryos used for edema experiment.

Figure 3J	Standard MO	Dyrk1a MO
Xenopus embryo (n)	97	114
Edema (n)	2	45
2 abnormal kidneys (n)	0	31
1 abnormal kidney (n)	1	14