

**Table S1.** Effects of metal ions, Triton × 100, Tween, SDS and EDTA on CsnQ activity.

<b>Reagent Added</b>	<b>Concentration (mM)</b>	<b>Relative Activity (%)</b>
None	-	100 ± 0.2
Al <sup>3+</sup>	5	48 ± 10.1
Fe <sup>3+</sup>	5	88 ± 2.6
K <sup>+</sup>	5	101 ± 4.3
Na <sup>+</sup>	5	104 ± 3.9
Mg <sup>2+</sup>	5	106 ± 0.7
Li <sup>+</sup>	5	106 ± 3.3
NH <sub>4</sub> <sup>+</sup>	5	107 ± 3.1
Fe <sup>2+</sup>	5	108 ± 2.6
Cu <sup>2+</sup>	5	108 ± 3.3
Ba <sup>2+</sup>	5	109 ± 4.2
Co <sup>2+</sup>	5	110 ± 2.4
Ca <sup>2+</sup>	5	112 ± 3.4
Zn <sup>2+</sup>	5	114 ± 3.8
Mn <sup>2+</sup>	5	121 ± 3.1
Triton ×100	5	5 ± 0.3
Tween	5	10 ± 1.0
SDS	5	5 ± 2.4
EDTA	5	5 ± 3.9