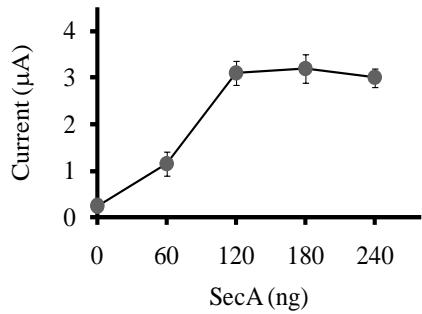


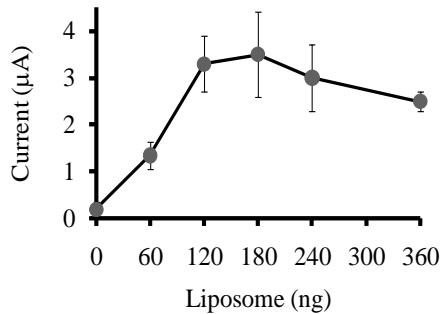
## Support Information

Fig. S1

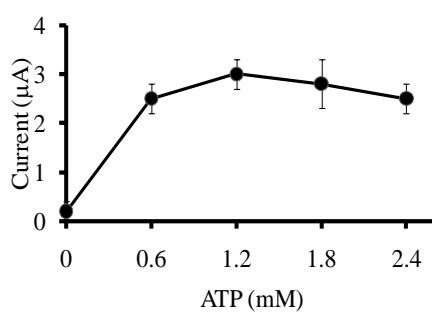
A



B



C



D

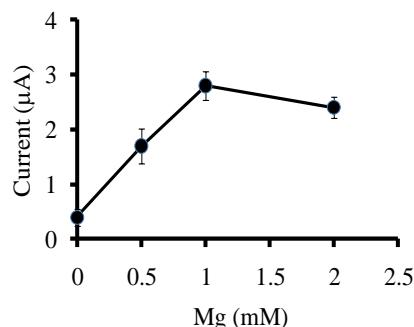


Fig. S1. Optimization of SecA ion-channel activity in the oocytes.

Titration of (A) SecA, (B) Liposomes, (C) ATP, and (D)  $Mg^{2+}$ . Injection mixtures in 50 nl contained: 120 ng liposomes, 1.2 mM ATP, 1 mM  $Mg^{2+}$ , 14 ng proOmpA and 120 ng SecA, excepted the tested component. The recording was 3 hours after injection.