Supporting information

Berbamine reduces chloroquine-induced itch in mice through inhibition of MrgprX1

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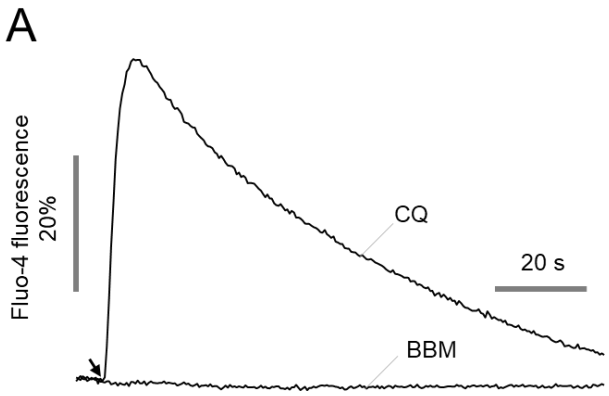

Figure S1. Effect of berbamine on MrgprX1 activation. (**A**) Intracellular calcium levels were measured using Fluo-4 NW in HEK293T cells expressing MrgprX1. The cells were treated with 30 μM berbamine (BBM) or 1 mM of chloroquine (CQ).

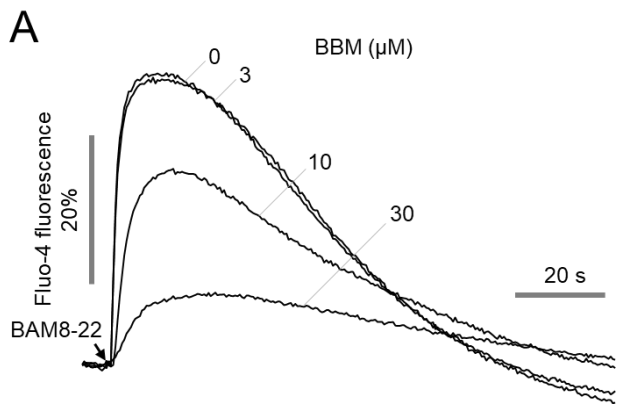

Figure S2. Effect of berbamine on BAM8-22 induced MrgprX1 activation. (**A**) Intracellular calcium levels were measured using Fluo-4 NW in HEK293T cells expressing MrgprX1. The cells were pretreated with indicated concentrations of berbamine (BBM) for 10 min prior to the treatment of 500 nM BAM8-22.

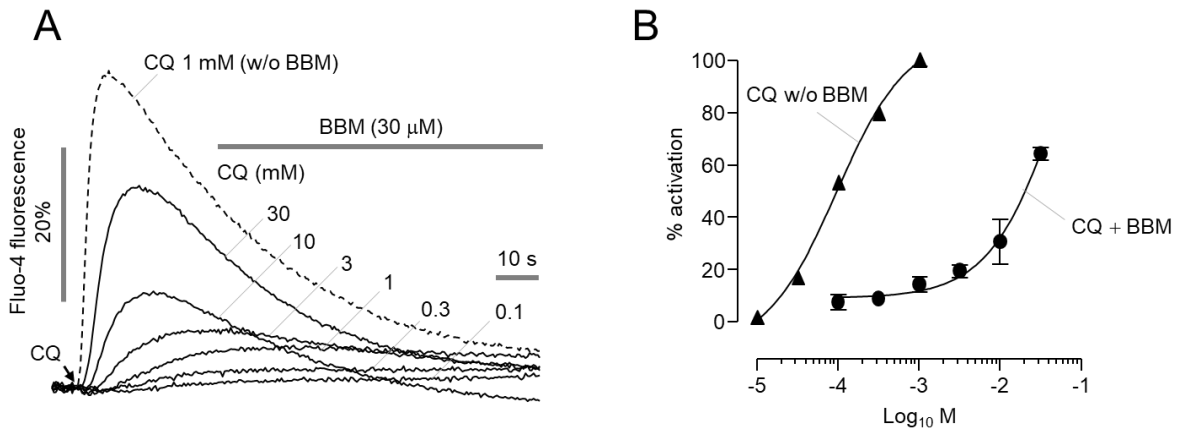

Figure S3. Dose response of CQ-induced MrgprX1 activation in the presence or absence of berbamine. (**A**) Intracellular calcium levels were measured using Fluo-4 NW in HEK293T cells expressing MrgprX1. The cells were pretreated with 30 μM of berbamine (BBM) and applied with indicated concentrations of CQ. (**B**) Summary of dose-response (mean ± S.E., n = 4). The dose response data of CQ in the absence of BBM was obtained from Figure 1B.