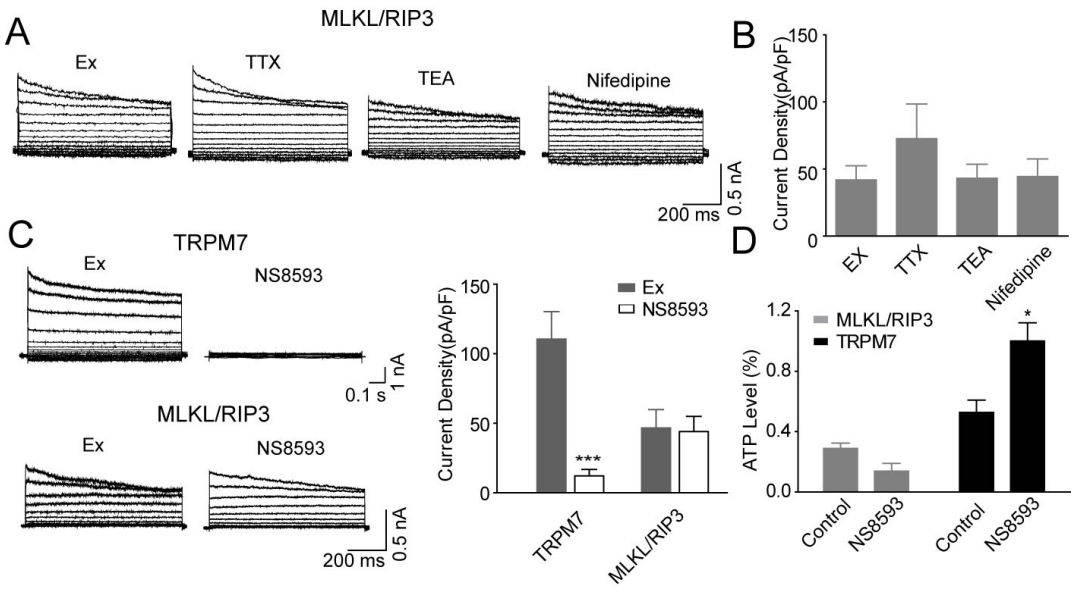

Figure S6. The effects of the inhibitors of sodium, potassium, calcium and TRPM7 channels on MLKL currents in HEK 293 cells. (A) Representative traces of MLKL channels in the normal extracellular solution (EX), 1 μM Tetrodotoxin (TTX), 40 mM Tetraethylammoniumn (TEA) and 60 μM Nifedipine. (B) Histograms showing current density of MLKL channels under the indicated conditions. (C) Representative currents and current density of TRPM7 and MLKL with and without 10 μM NS8593. Being a specific TRPM7 inhibitor, 10 μM NS8593 completely inhibits the currents mediated by TRPM7 but does not affect the currents recorded in HEK293 cells coexpressing MLKL/RIP3. For the whole-cell recordings, the external solution contained (in mM): NaCl 140, KCl 5, $CaCl_2$ 2, HEPES 20, glucose 10 (adjusted to pH 7.4 with NaOH); the internal solution contained (in mM): CsCl 145, NaCl 8, EGTA 10, HEPES 10 (adjusted to pH 7.2 with CsOH). (B) Histograms showing the current density of TRPM7 and MLKL/RIP3 before and after application of 10 μM NS8593. (D) NS8593 (10μM) reduces the cell death of HEK 293 cells induced by TRPM7 but lacks protection activity on the cell death induced by MLKL/RIP3.