

Figure S1. Schematic diagram showing the experimental timeline. PC, Petroleum cream; NS, Normal saline; NC, Normal control; MTX, Methotrexate; LSG, Low molecular weight sulfated galactan; IP, Intraperitoneal; IMQ, Imiquimod.

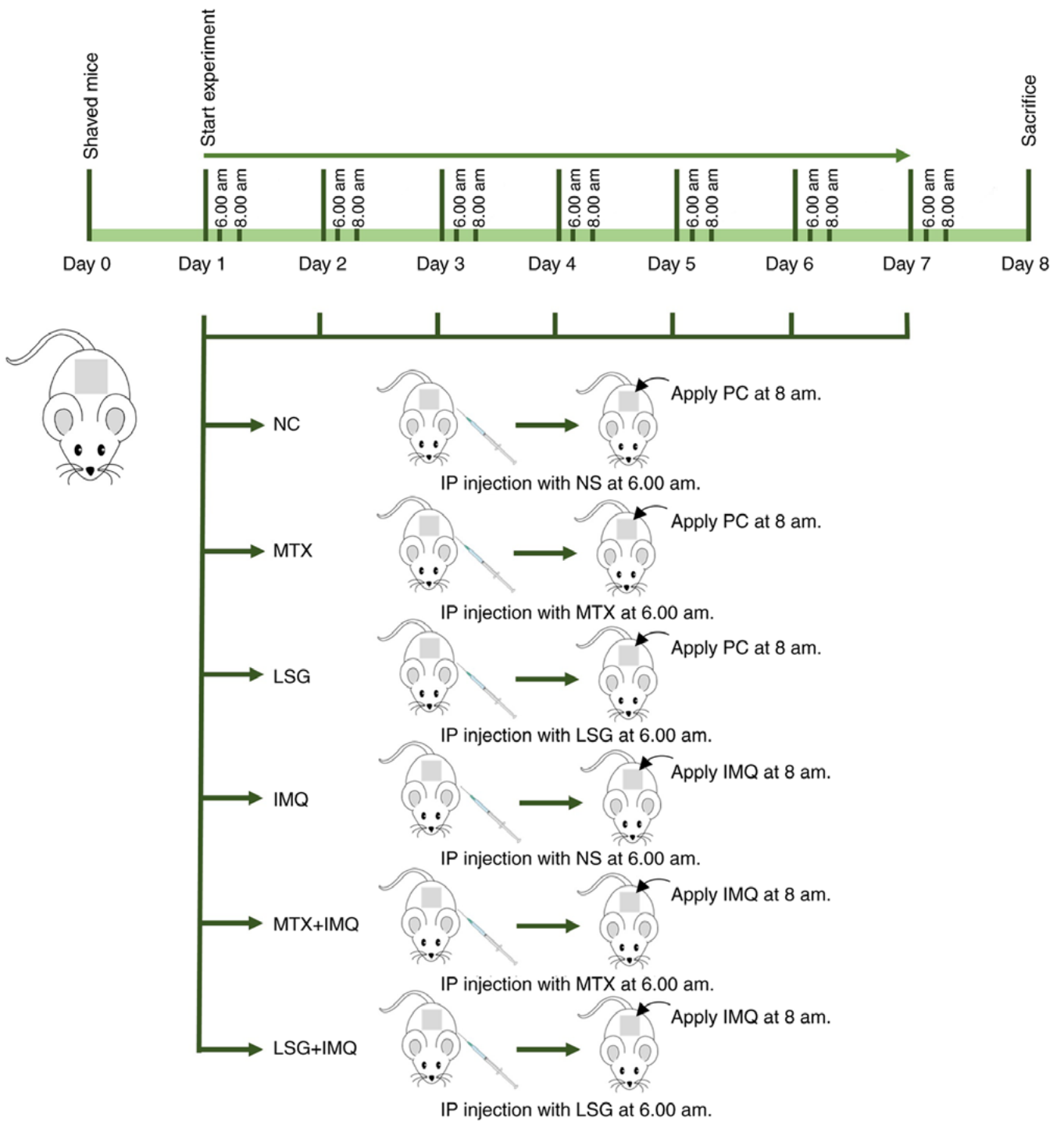


Figure S2. GPC, FTIR and NMR profiles of LSG from *Gracilaria fisheri*. GPC, gel permeation chromatography; FTIR, Fourier-transform infrared; NMR, nuclear magnetic resonance; LSG, Low molecular weight sulfated galactan.

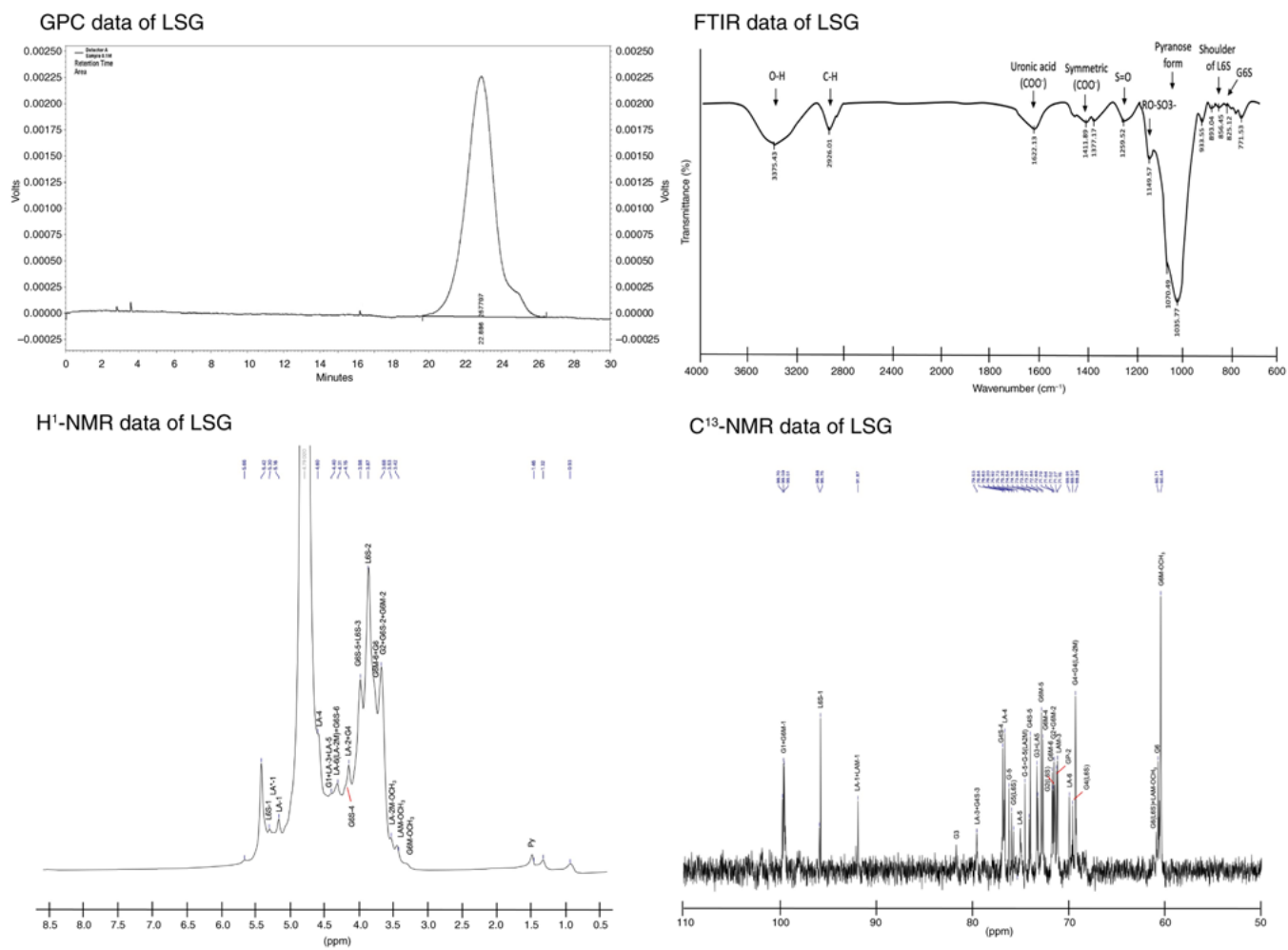


Figure S3. Effect of LSG on psoriasis-like skin in IMQ-induced psoriatic mice. Representative dorsal skin on days 1, 3, 5, and 7. LSG treatment visibly decreased the severity of skin lesions from day 5 to 7. LSG, Low molecular weight sulfated galactan; IMQ, Imiquimod; NC, Normal control; MTX, Methotrexate.

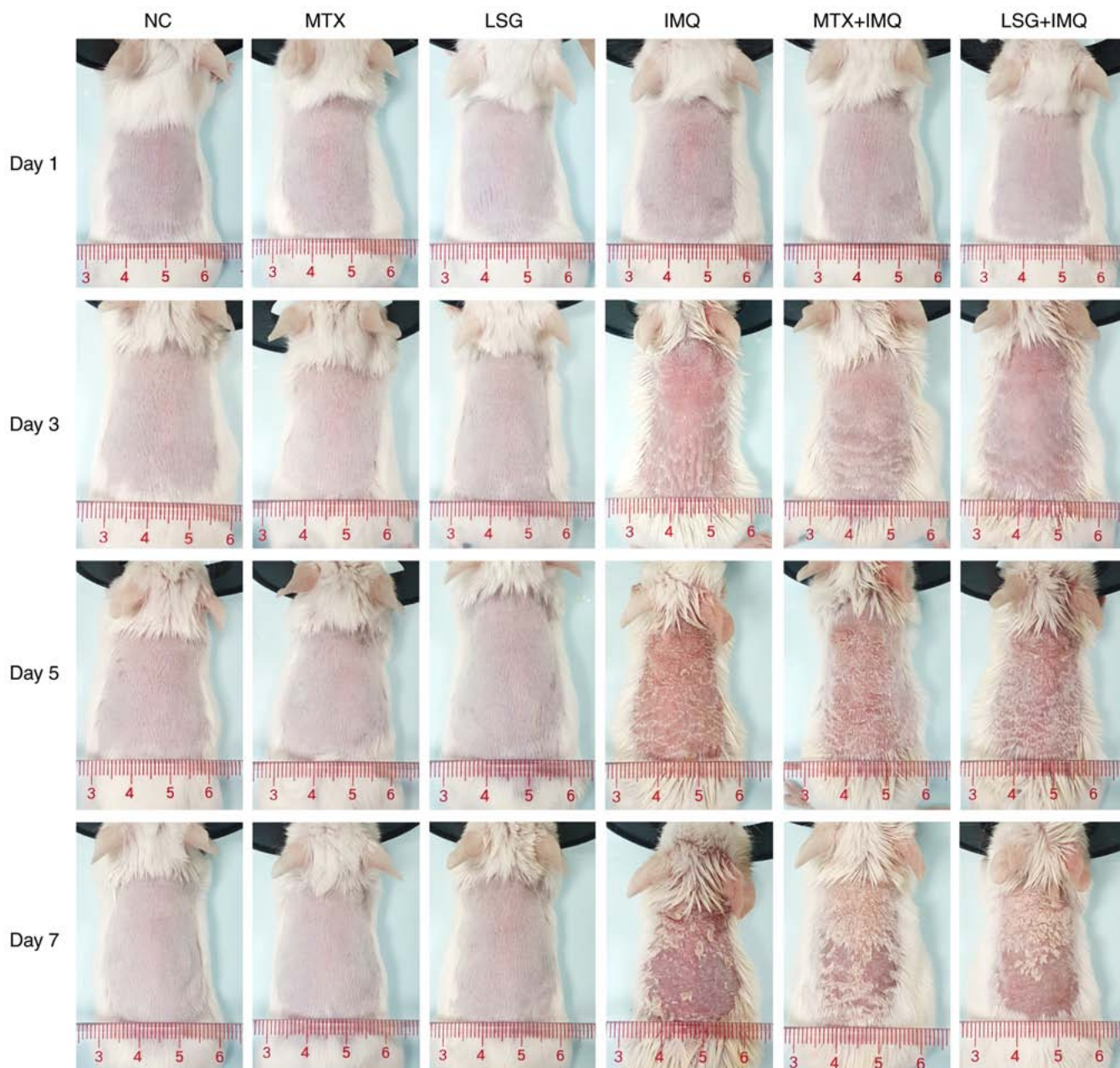


Figure S4. Effect of LSG on IMQ-induced psoriasis severity and body weight in mice. Daily evaluation of (A) erythema, (B) scaling and (C) skin thickening using a modified human PASI scoring system. (D) Cumulative PASI score. (E) Body weight. LSG, Low molecular weight sulfated galactan; IMQ, Imiquimod; NC, Normal control; PASI, Psoriasis area and severity index; MTX, Methotrexate.

