



**Fig. S4. PF-543 and ABC294640 selectively inhibit SK1 and SK2 activity, respectively.** C57BL/6 mice were treated once daily with imiquimod (IMQ) cream or control vehicle cream applied to the shaved back for 6 consecutive days. Once daily MP-543 (a SK1 inhibitor) and ABC294640 (a SK2 inhibitor) application began at 3 days before application of IMQ cream and maintained during IMQ treatment. (A) Representative western blot analysis of SK1 and SK2 levels were examined using skin samples. (B) Skin SK1 and SK2 enzyme activities were measured ( $n=5$ ). Results are mean  $\pm$  SEM ( $n=5$ ). \* $p < 0.05$ , \*\* $p < 0.01$ . The images are representative of 3 independent experiments.