MATERIALS AND METHODS

MICE

Mice from the standard inbred strains BALB/cBy and C57BL/6J and the wild-derived inbred strain SPRET/Ei were obtained from The Jackson Labratory (Bar Harbor, ME). Mice from the wild-derived inbred strain CAST/Ei were kindly donated by S. Clark (University of Connecticut Health Center, Farmington, CT). For clarity, these four strains will be abbreviated BALB, B6, CAST, and SPRET, respectively, hereafter. BALB-mshi mice were provided by M. Davisson and B. Harris (The Jackson Laboratory).

SKIN GRAFTING

SURGERY. Skin grafts were exchanged between 5-to-7-wk-old donor and recipient mice, according to the method of Bailey and Usama (1960). Mice were anesthetized with sodium pentobarbitol (6 mg/ml) at a dose of 0.01 ml/gm body weight. Grafts and graft beds were provided by removing pieces of ventral tail skin approximately 0.75 cm long with a #11 scapel blade. Cuts were made deep enough to bare tendons, but not nick blood vessels. Tail-skin pieces from donors were rotated 180˚ before being placed in graft beds on recipient tails. Thus, hair on grafted skin grows against the normal grain (in a headward direction) facilitating observation of the grafts. Positioned grafts were pressed firmly into place, and protected by glass tubing slipped over recipient tails. Tubes were fastened with tape, and were removed after 48 hrs.