DNA FISH demonstrates normal chromosome composition in Sry-targeted mES clones (representative image). A total of 40 chromosomes, including Y chromosomes, were observed in Sry\textsuperscript{m1}, Sry\textsuperscript{m2}, Sry\textsuperscript{m3}, and Sry\textsuperscript{m4} metaphase/interphase mESCs, whereas Sry\textsuperscript{m5} cells are aneuploid (containing 41 chromosomes). BAC clones, 291C04 and 146P03, from the RPCI-24 library, were used for probing the mouse Y short arms (green) and long arms (red), respectively. DNA was counterstained with DAPI (gray).