**Figure S1.**

**Disruption of the tpc2 gene**

A. Disruption construct. 5’ and 3’ arms were amplified from genomic DNA using primers with restriction enzyme sites compatible with the vector pLPBLP. B. Schematic representation of the homologous recombination event. C. Following transfection into Ax2 cells and selection with Blasticidin, genomic DNA (gDNA) was prepared from single resistant colonies and used in a diagnostic PCR screen to confirm integration of the bsR cassette at the tpc locus. Two primer sets (W3, 5’ BSR-LOX and 3’ BSR-LOX, W5) were used in a PCR reaction to check for targeted insertion of the bsR cassette at the 5’ and 3’ ends, respectively. A primer set (W3 and TPC-5-R) was used as the positive control reaction. A random insertion of the Blasticidin resistance (bsR) cassette produced no PCR product for the screen, only targeted insertion of both arms produced 938 bp and 1,271bp bands. Clones T-II-1, T-II-23, T-I-10, T-I-16 and T-I-22 had successful insertions of both the 5’ arm and 3’arm. The PCR bands were resolved on 1% agarose gels. D. Loss of the tpc2 coding sequence was confirmed by PCR using primers from the central portion of tpc2 which was replaced by the Bsr cassette. Amplification using primers specific for apl and mcln genes are used as a control.