

Appendix 3. ESBL and CMY-2 encoding genes

ESBL encoding genes

*bla*_{CTX-M} (599 bp)

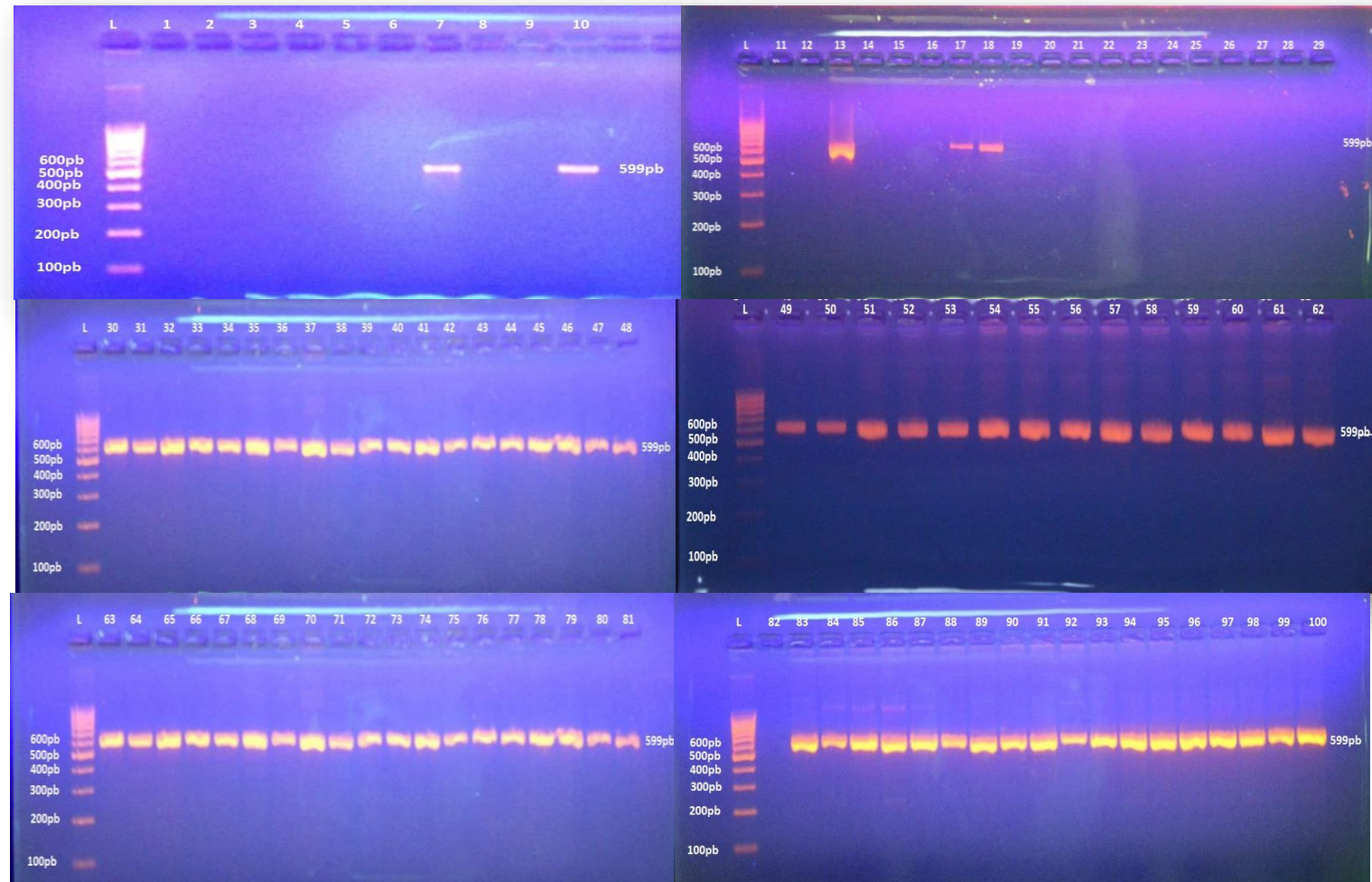


Figure1: Representative agarose gel electrophoresis of *bla*_{CTX-M} (599 bp) carrying *E. coli* isolates isolated from urinary tract infection patients. (Lane L is a 1.5kb DNA ladder, and lanes 1 to 100 are amplified *E. coli* PCR products. Samples were amplified on 1.5% agarose gel.

*bla*_{TEM} (500 bp)

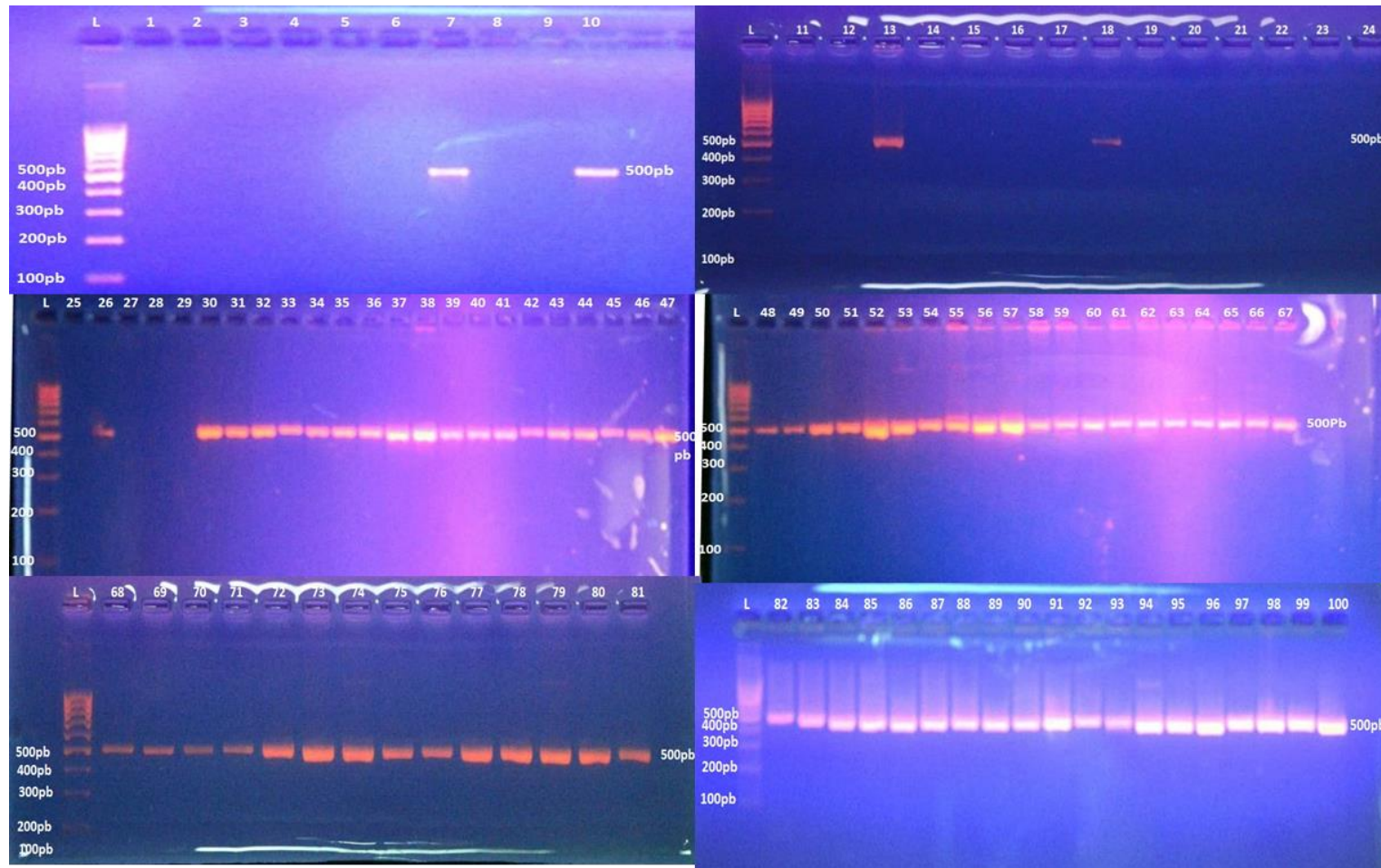


Figure 2: Representative-agarose gel electrophoresis of *bla*_{TEM} (500 bp) carrying *E. coli* isolates isolated from urinary tract infection patients. (Lane L is a 1.5 kb DNA ladder, and lanes 1 to 100 are amplified *E. coli* PCR products. Samples were amplified on 1.5% agarose gel.

*bla*_{SHV} (481 bp)

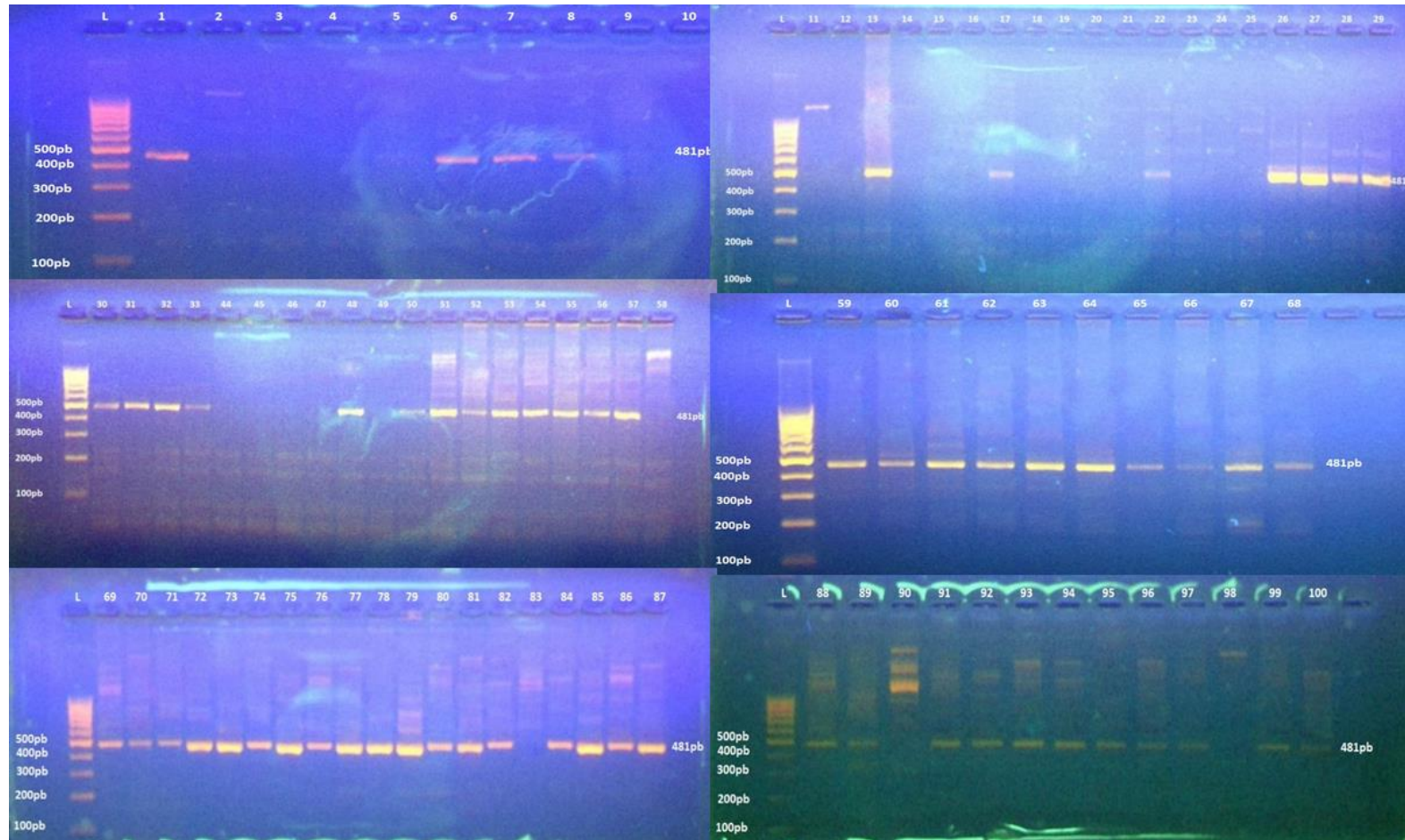


Figure 3: Representative-agarose gel electrophoresis of *bla*_{SHV} (481 bp) carrying *E. coli* isolates isolated from urinary tract infection patients. (Lane L is a 1.5 kb DNA ladder, and lanes 1 to 100 are amplified *E. coli* PCR products. Samples were amplified on 1.5% agarose gel.

CMY-2-type AmpC β -lactamase encoding gene (1226 bp)

*bla*_{CMY-2} (1226 bp)

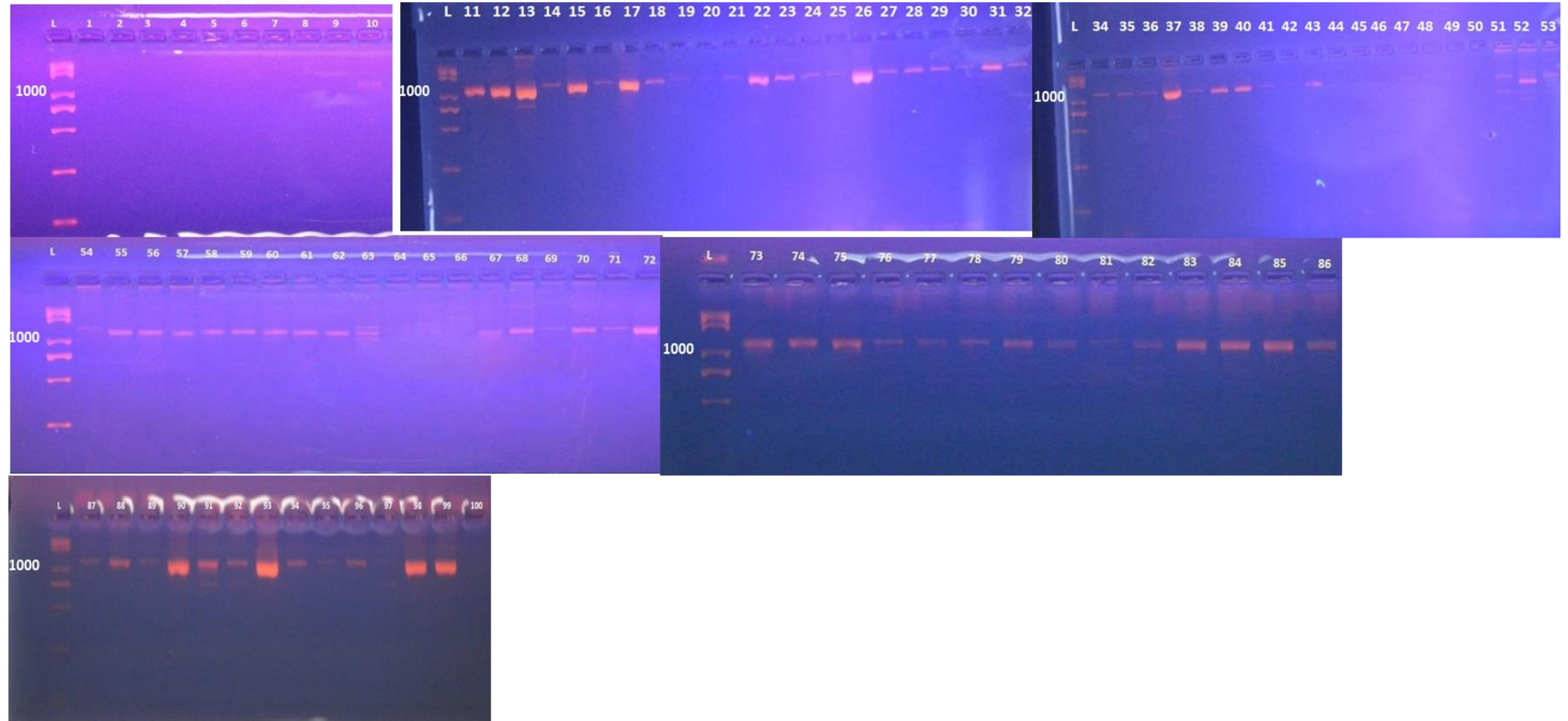


Figure 4: Representative-agarose gel electrophoresis of *bla*_{CMY-2} (1226 bp) carrying *E. coli* isolates isolated from urinary tract infection patients. (Lane L is a 1.5 kb DNA ladder, and lanes 1 to 100 are amplified *E. coli* PCR products. Samples were amplified on 1.5% agarose gel.

Phylogroups of *E. coli* isolates

Phylogenetic grouping

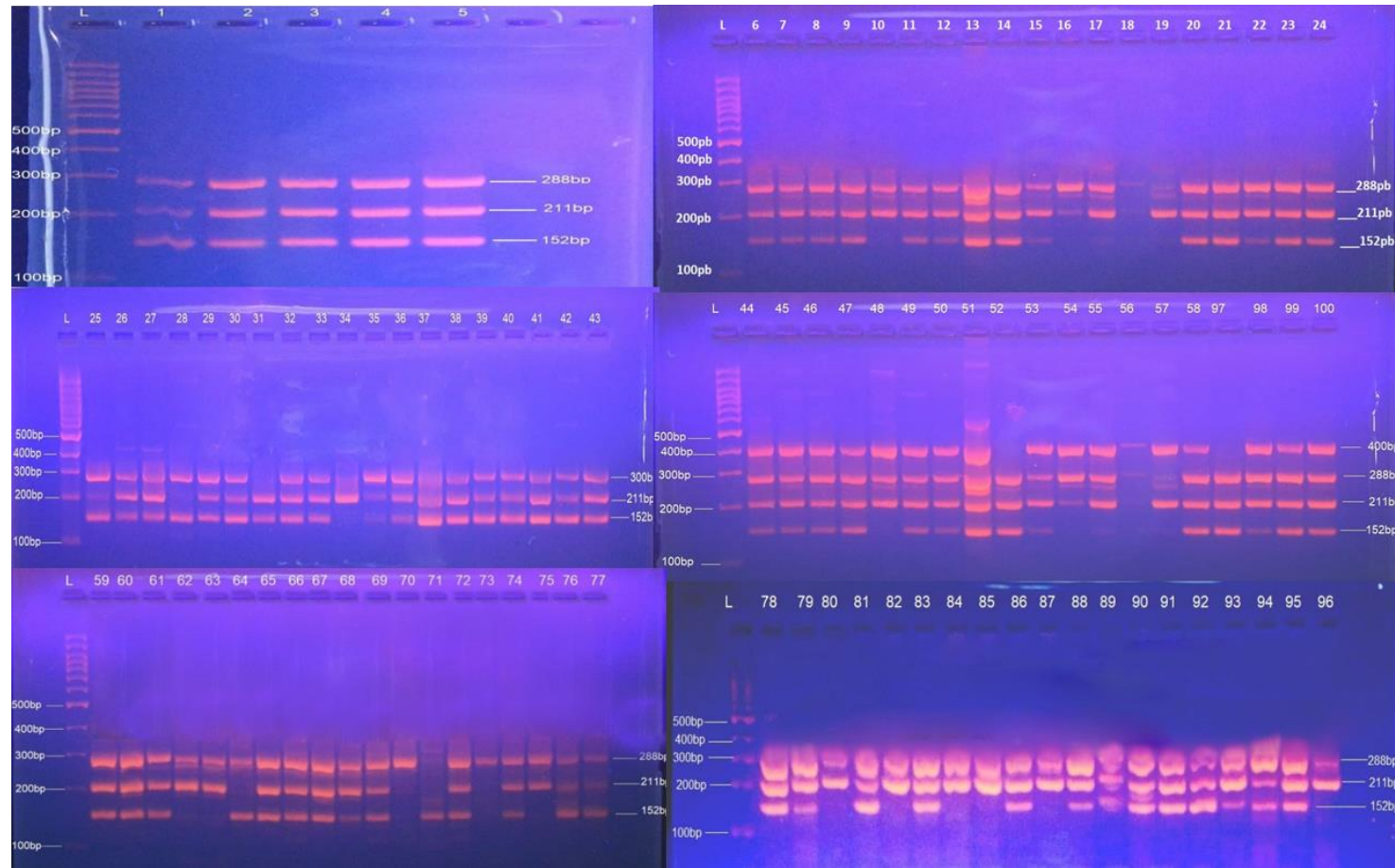


Figure 5: Representative agarose gel electrophoresis of *E. coli* genes used to classify *E. coli* into various phylogroups (Lane M is 1kb DNA ladder, and lanes 1 to 100 are amplified PCR products with the following *E. coli* phylogrouping genes; *chuA* (288 bp), *yjaA* (211 bp) and TspE4C2 (152 bp). specimens were amplified on 1.5% agarose gel and isolates are labelled at the top of the figure 5.