Step 1: use Trpv3 wild type Hope as a starting plasmid, and order “oligo to order to make the acceptor plasmid HOPE”.

Step 2: clone in the oligo into the wild type using SacII and BspEI as these can be modified for all tiles using the file oligo to order to make the acceptor plasmid HOPE “.

Step3: now that the acceptor plasmid has been made clone in “Tile\_1\_design\_spine\_design1\_HoPE” using bsmb1.

Step3: using “tile\_1\_sap1\_design\_using spine HOPE” clone in the sap1 sites using sap1.

Step4: align using “ trpv3 wt with barcode added to alight with digital cloning hope” to find a 100 percent recovery of the plasmid with no mutations.