

Standard FL-SMN:

5' -TCAGATAACATCAAGCCCAAATCTGCTCCATGGAACCTCTTTTCTCC
 CTCCACCACCCCCCATGCCAGGGCCAAGACTGGGACCAGGAAAGATAAT
 TCCCCCACCACCTCCCATATGTCCAGATTCTCTTGATGATGCTGATGCT
 TTGGGAAGTATGTTAATTTTCATGGTACATGAGTGGCTATCATACTGGCT
 ATTATATGGGTTTCAGACAAAATCAAAAAGAAGGAAGGTGCTCACATTC
 CTTAAATTAAGGAGAAATGCTGGCATAGAGCAGCACTAAATGACACCAC
 TAAAGAAACGATCAGACAGATCTGGAATGTGAAGCGTTATAGAAGATAA
 CTGGCCTCATTCTTCAAAATATCAAGTGTGGAAGAAAAAAGGAAG
 TGGAATGGGTAACTCTTCTTGATTAAAAGTTATGTAATAACCAAATGCA
 ATGTGAAATATTTTACTGGACTCTATTTTGAAAAACCATCTGTAAAAGA
 CTGGGGTGGGGGT-3' (SEQ ID NO. 1)

Standard delta7:

5' -ACCACCCCCCATGCCAGGGCCAAGACTGGGACCAGGAAAGCCAGGT
 CTAAAATTCAATGGCCCACCACCGCCACCACCACCACCCCACT
 TACTATCATGCTGGCTGCCTCCATTTCTTCTGGACCACCAATAATTCC
 CCCACCACCTCCCATATGTCCAGATTCTCTTGATGATGCTGATGCTTTG
 GGAAGTATGTTAATTTTCATGGTACATGAGTGGCTATCATACTGGCTATT
 ATATGGAAATGCTGGCATAGAGCAGCACTAAATGACACCACTAAAGAAA
 CGATCAGACAGATCTGGAATGTGAAGCGTTATAGAAGATAACTGGCCTC
 ATTTCTTCAAAATATCAAGTGTGGAAGAAAAAAGGAAGTGAATGG
 GTAACCTCTTCTTGATTAAAAGTTATGTAATAACCAAATGCAATGTGAAA
 TATTTTACTGGACTCTATTTTGAAAAACCATCTGTAAAAGACTGGGGTG
 GGGGTGGGAGGCC-3' (SEQ ID NO. 2)

Standard GAPDH:

5' -AAATTGAGCCCGCAGCCTCCCGCTTCGCTCTCTGCTCCTCCTGTTT
 GACAGTCAGCCGCATCTTCTTTTGCGTCGCCAGCCGAGCCACATCGCTC
 AGACACCATGGGGAAGGTGAAGGTCGGAGTCAACGGATTTGGTCGTATT
 GGGCGCCTGGTCAACCAGGGCTGCTTTTAACTCTGGTAAAGTGGATATTG
 TTGCCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATGTT
 CCAATATGATTCCACCCATGGCAAATTCATGGCACCGTCAAGGCTGAG
 AACGGGAAGCTTGTCATCAATGGAAATCCCATCACCATCTTCCAGGAGC
 GAGATCCCTCCAAAATCAAGTGGGGCGATGCTGGCGCTGAGTACGTCGT
 GGAGTCCACTGGCGTCTTCAACCACCATGGAGAAGGCTGGGGCTCATTTG
 CAGGGGGGAGCCAAAAGGGTCATCATCTCTGCCCCCTCTGCTGATGCCC
 CCATGTTTCGTCAT-3' (SEQ ID NO. 7)

(A) FOR FL-SMN DETECTION
003-Fw-FL-SMN:
5' -GCTCACATTCCTTAAATTAAGGAGAAA-3' (SEQ ID NO. 3)
005-Rv-SMN:
5' -TCCAGATCTGTCTGATCGTTTCTT-3') (SEQ ID NO. 5)
004-Probe-SMN:
5' -/56-FAM/CTGGCATAG/ZEN/AGCAGCACTAAATGACACCCAC/31ABkFQ/-3' (SEQ ID NO. 4)

(B) FOR Delta7 DETECTION
006-Fw-delta7:
5' -TGGCTATCATACTGGCTATTATATGGAA-3' (SEQ ID NO. 6)
005-Rv-SMN:
5' -TCCAGATCTGTCTGATCGTTTCTT-3') (SEQ ID NO. 5)
004-Probe-SMN:
5' -/56-FAM/CTGGCATAG/ZEN/AGCAGCACTAAATGACACCCAC/31ABkFQ/-3' (SEQ ID NO. 4)

FIG. 2



FIG. 3A

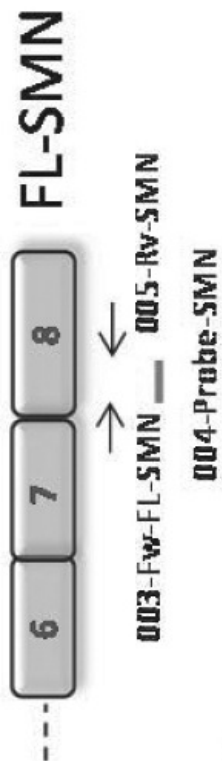


FIG. 3B

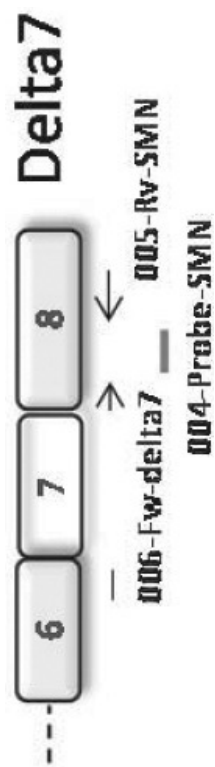


FIG. 3D

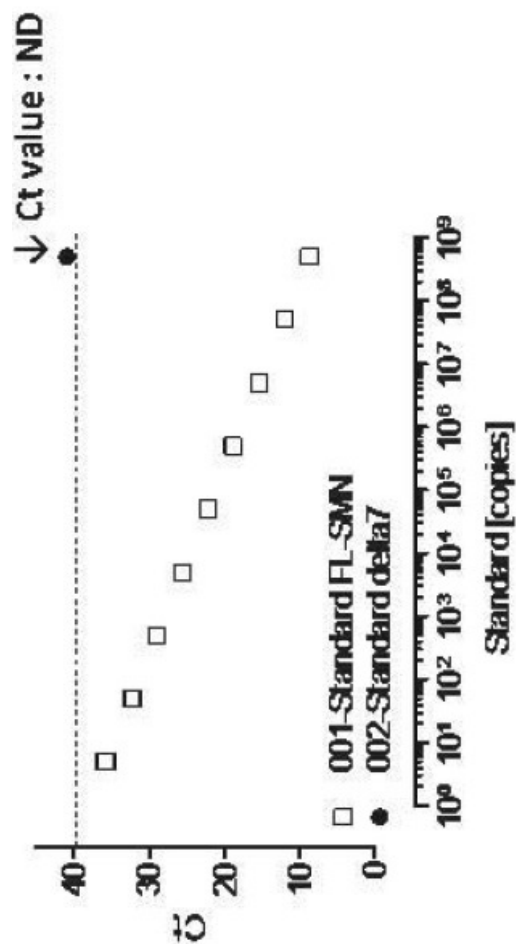


FIG. 3C

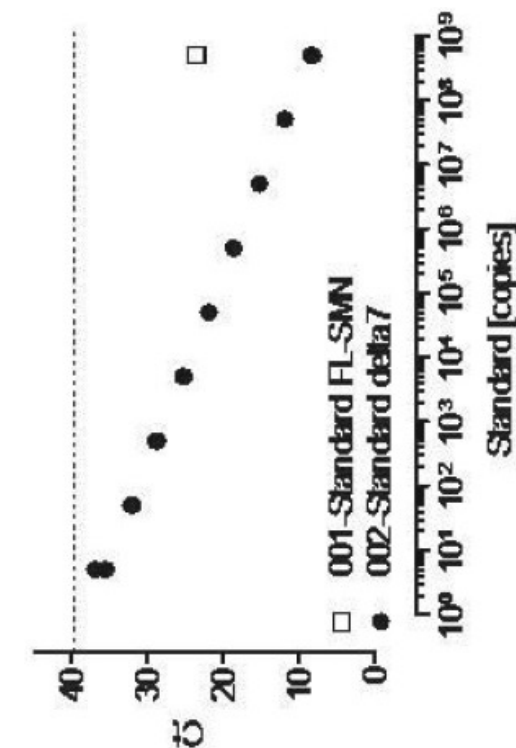


FIG. 3E

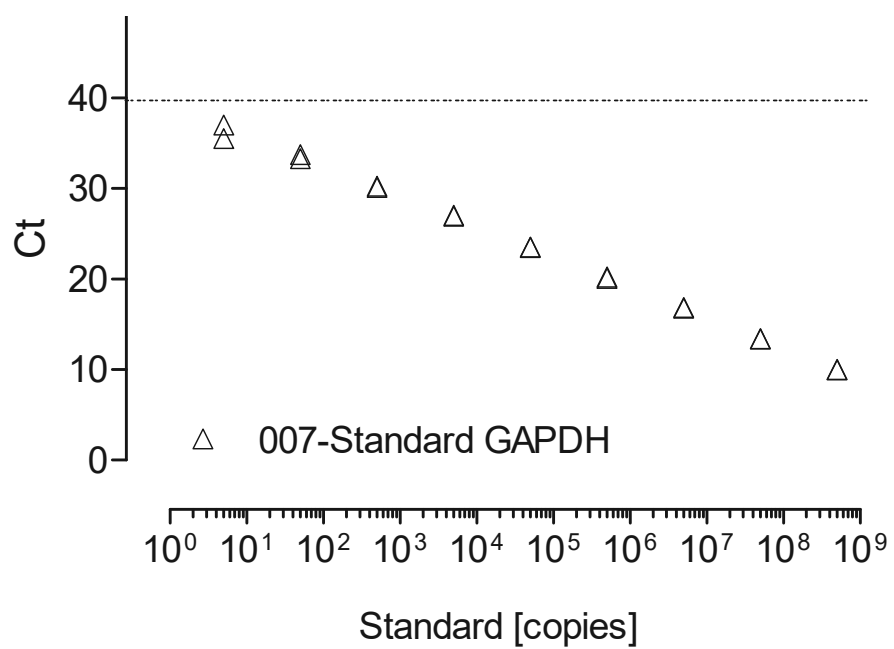


FIG. 4

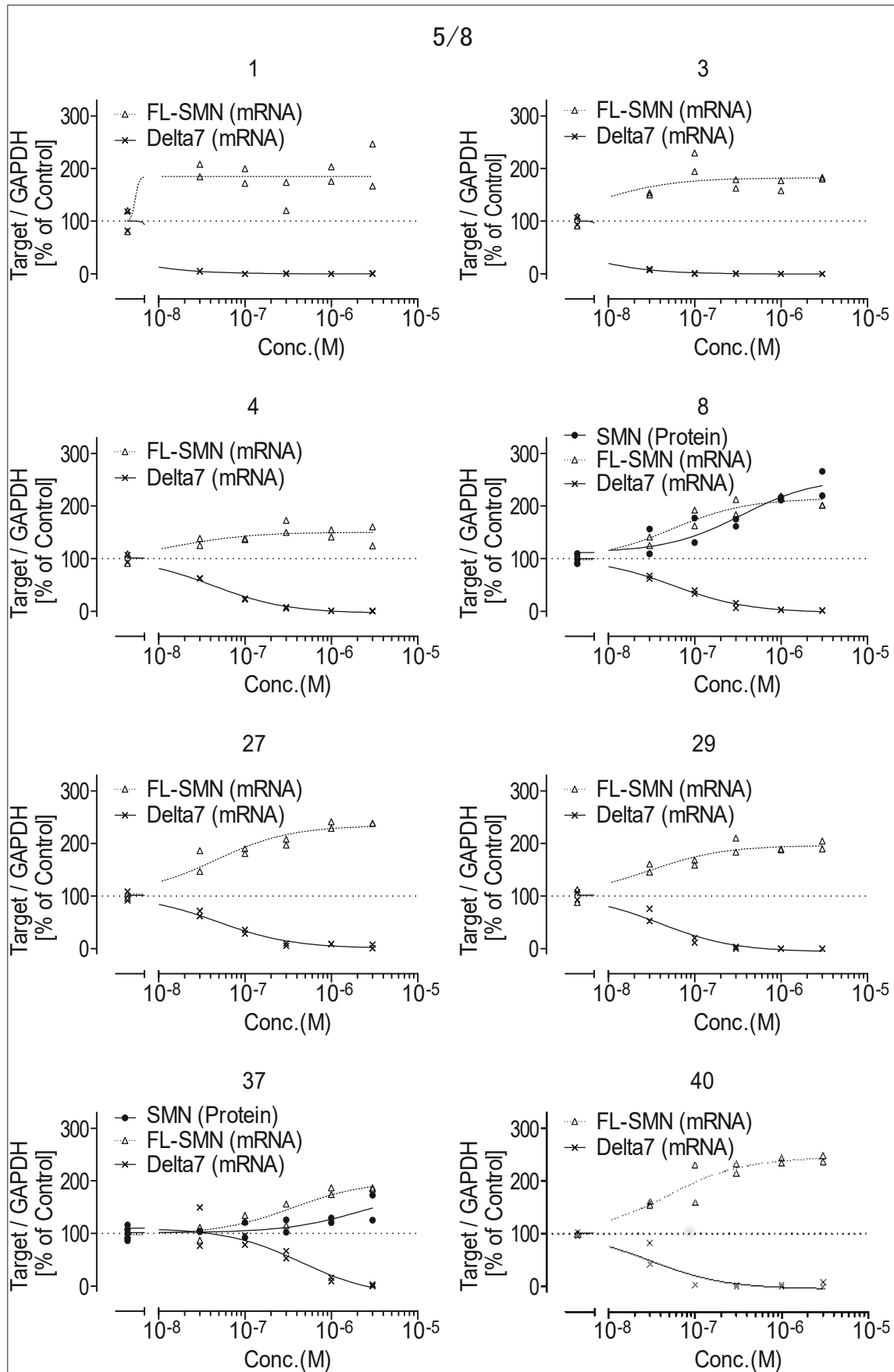
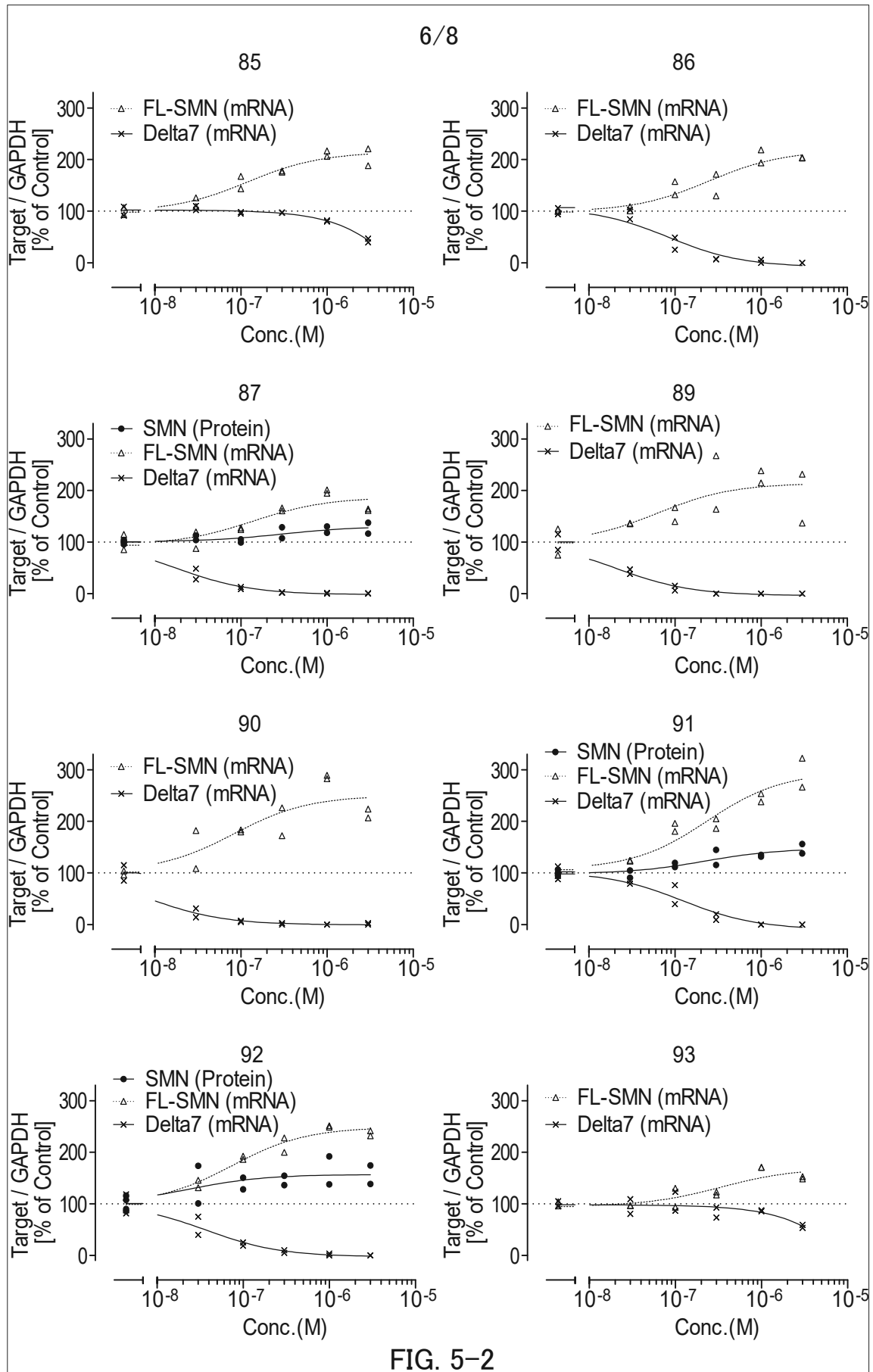
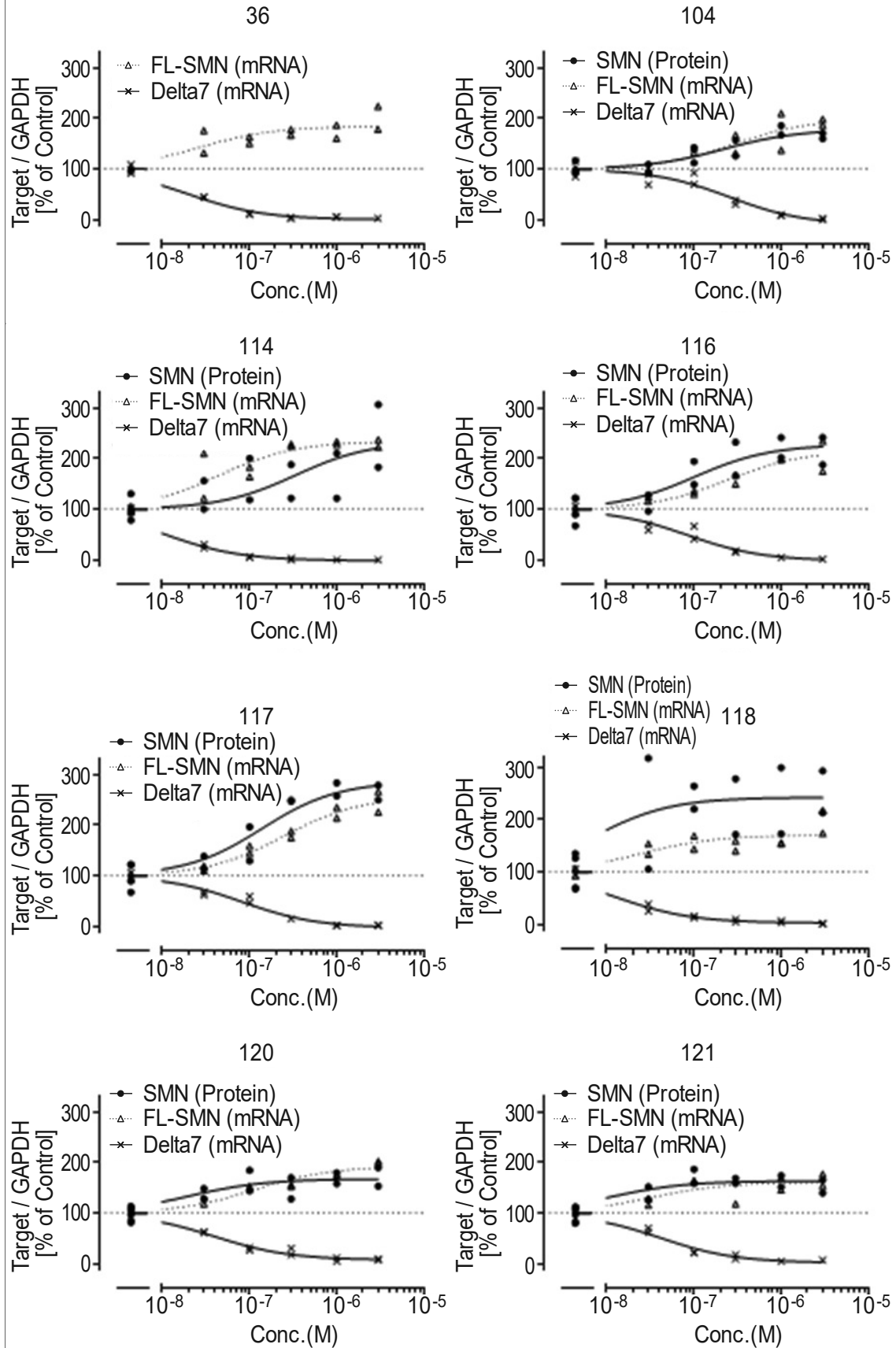


FIG. 5-1





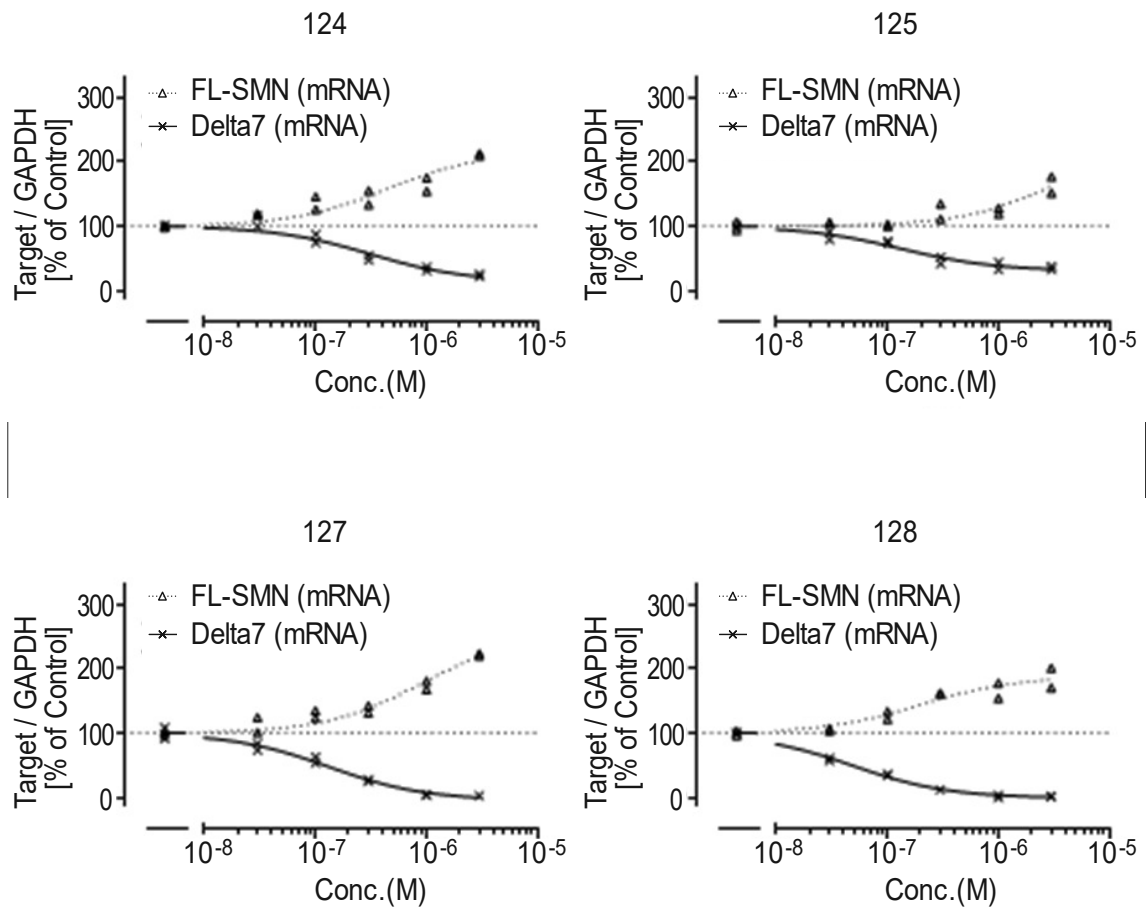


FIG. 5-4