CLAIMS

1. An attenuated dengue virus (DENV) vaccine composition comprising one or more non-naturally-occurring attenuated DENVs selected from the group consisting of a mixture of attenuated serotype 1 dengue viruses (DENV1), a mixture of attenuated serotype 2 dengue viruses (DENV2), a mixture of attenuated serotype 3 dengue viruses (DENV3), and a mixture of attenuated serotype 4 dengue viruses (DENV4), wherein said vaccine has the following features:

(a) said attenuated DENV1 mixture comprises DENV1 viruses with the following mutations: K482E/K, E483K, K484R/K, K568R, N1663K, I/T2353T, and A2364T/A;

wherein said numbering is based upon the DENV1 parent strain 03135 comprising SEQ ID NO:1;

(b) said attenuated DENV2 mixture comprises DENV2 viruses with the following mutations: D143N, T400K, D1102N, L1308F, E1654K, P2347P/L and T2828T/M;

wherein said numbering is based upon the DENV2 parent strain 99345 comprising SEQ ID NO:2;

(c) said attenuated DENV3 mixture comprises DENV3 viruses with the following mutations: I209L, S582G, K/R671K, A687V, T764I/T, F1211L, A1237T, and Q1563K;

wherein said numbering is based upon the DENV3 parent strain 16562 comprising SEQ ID NO:3; and,

(d) said attenuated DENV4 mixture comprises DENV4 viruses with the following mutations: L2187F and F/L2354S,

wherein said numbering is based upon the DENV4 parent strain 1036 comprising SEQ ID NO:4.

2. The attenuated tetravalent dengue virus vaccine of claim 1, wherein a mixing ratio of the attenuated serotype

1, 2, 3 and 4 dengue viruses is 1:1:1:1, 5:3:5:3, or 5:3:3:3.

3. The attenuated tetravalent dengue virus vaccine of claim 1, wherein a respective antigenic amount of the attenuated serotype 1, 2, 3 and 4 dengue viruses is 1 to 7 log 10 FFU/dose.