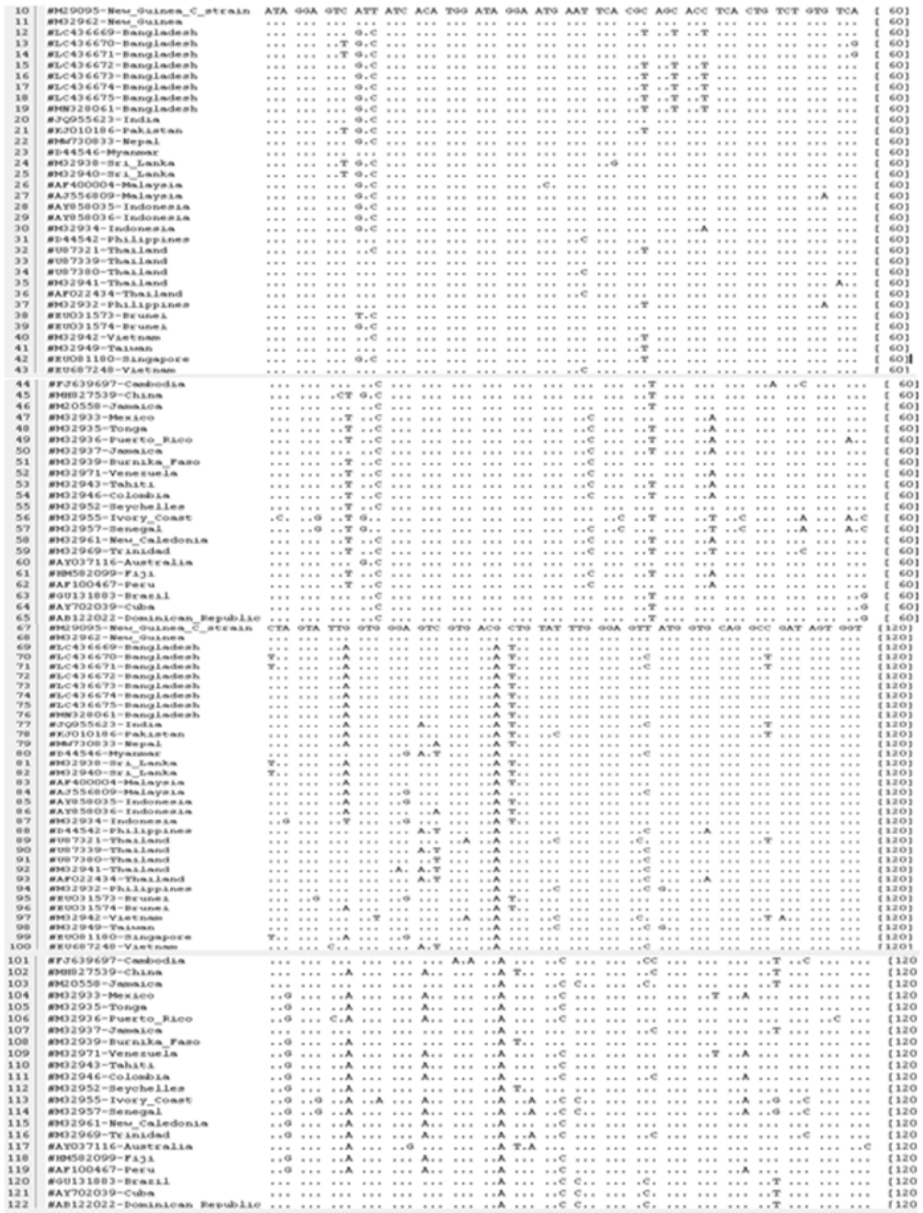
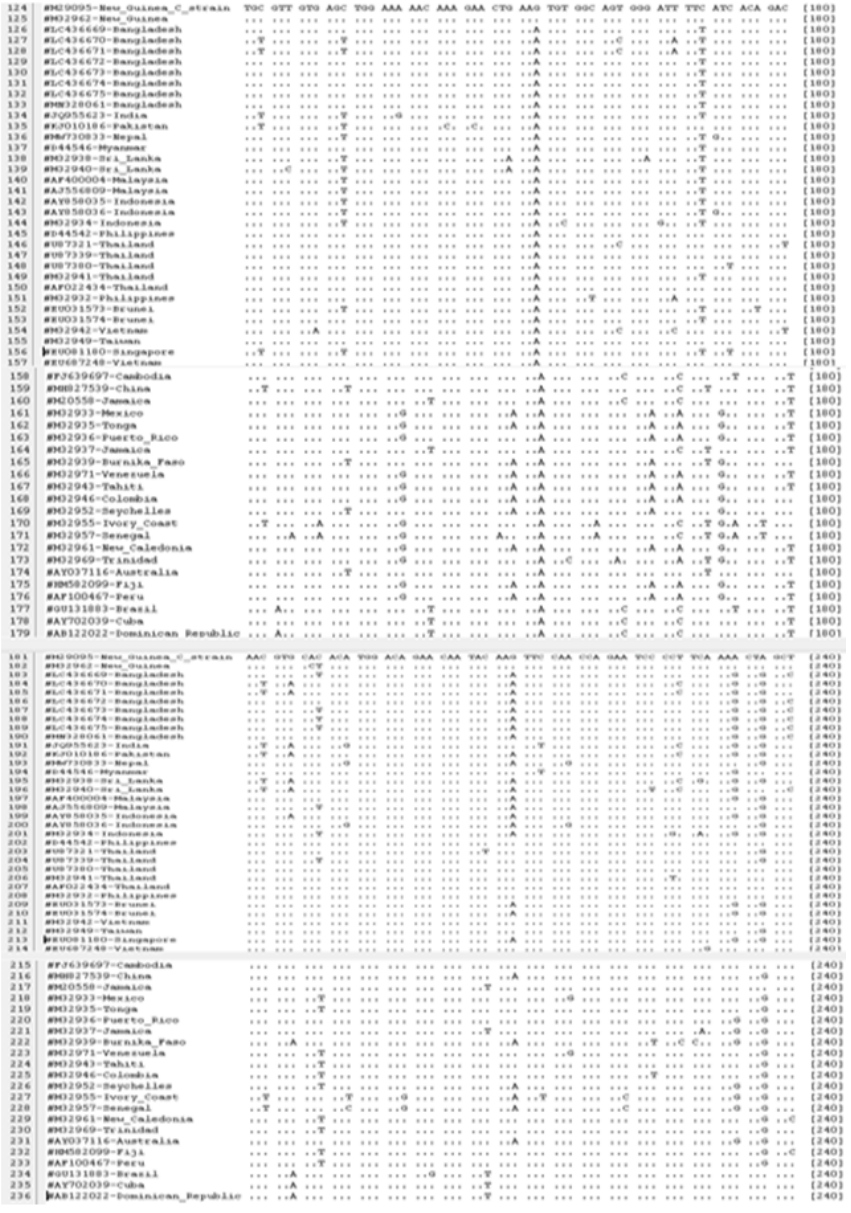
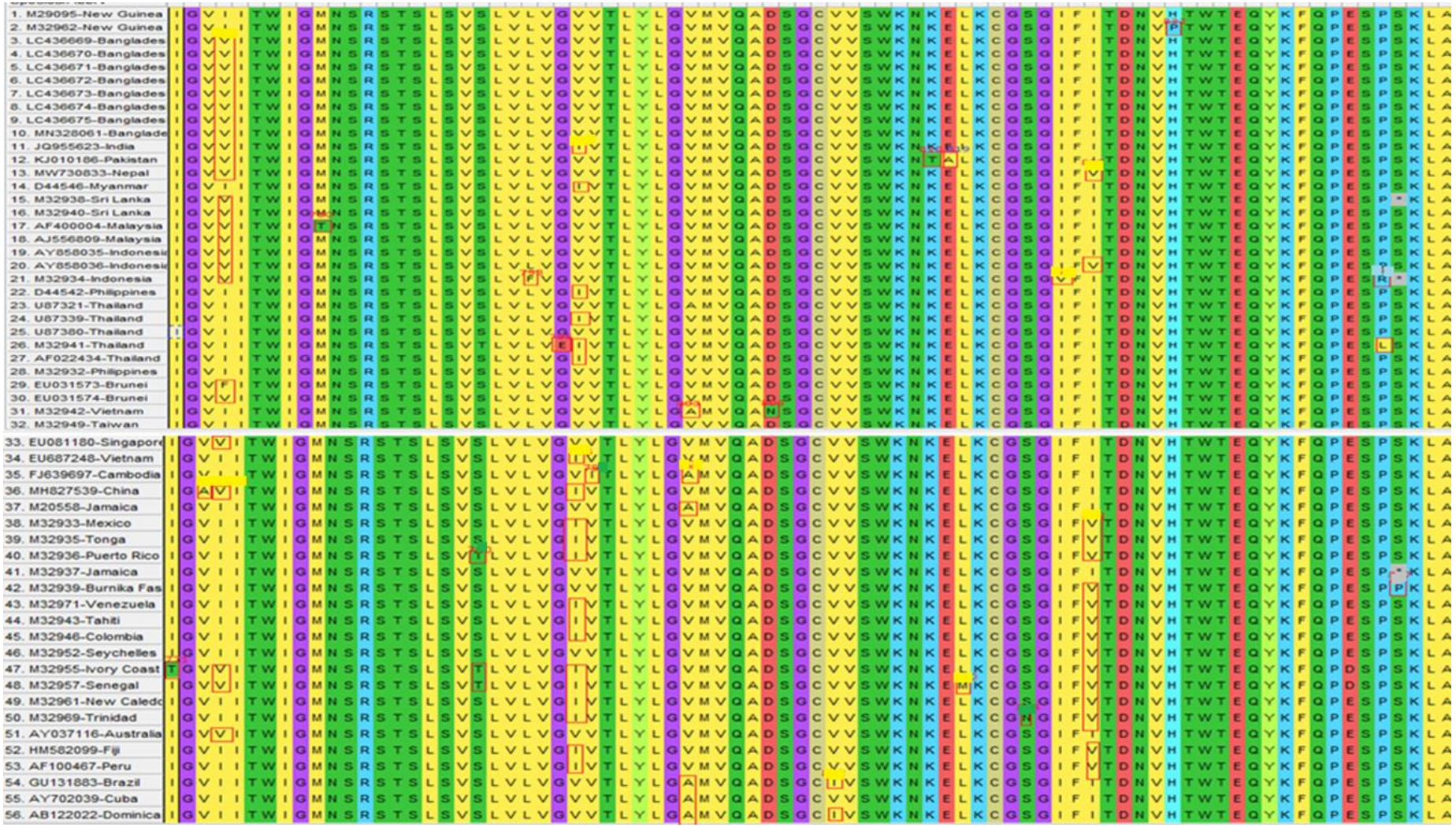
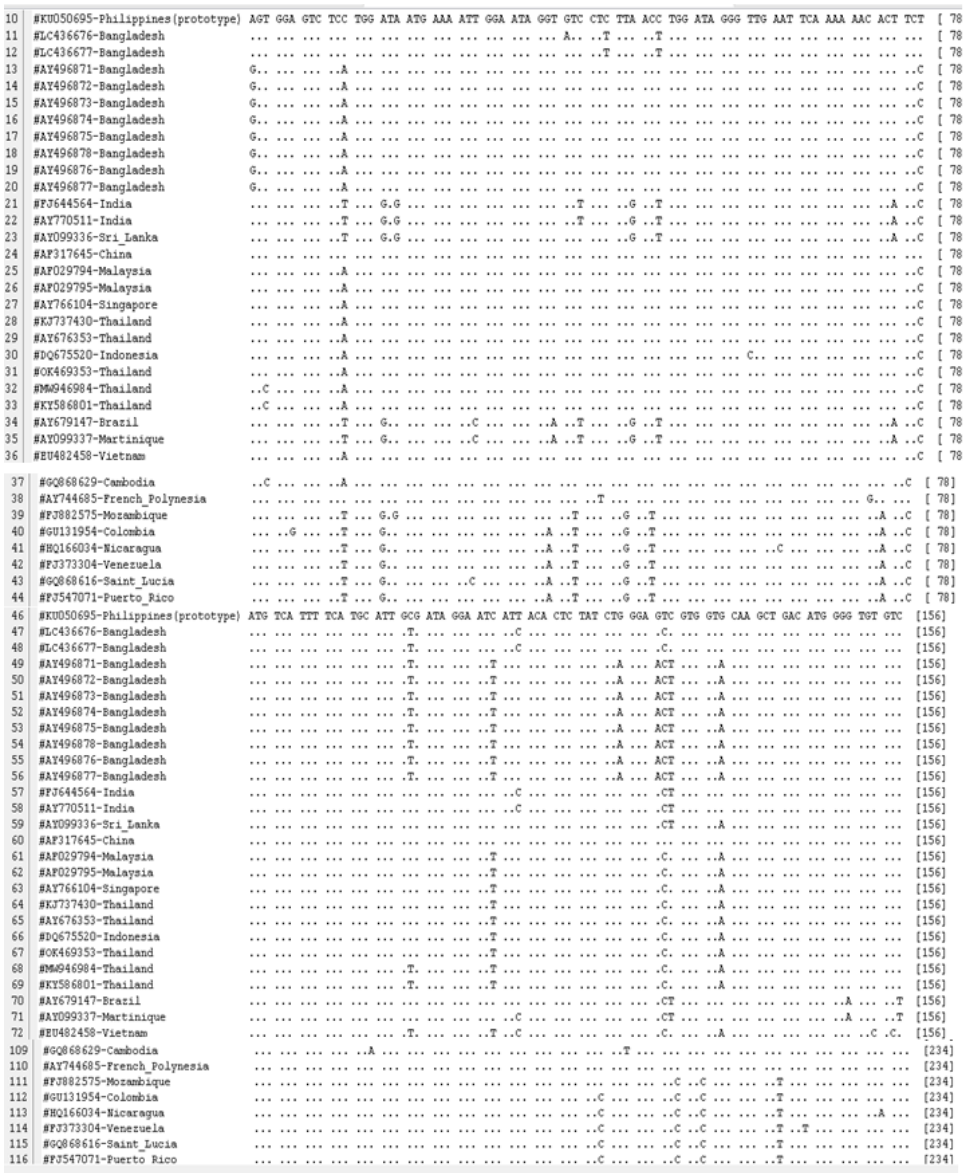






Supplementary Fig. 1. (A). 240bp DEN-2 E/NS1 nucleotide sequences of different geographical regions of the world obtained from GenBank and aligned in MEGA11. **(B).** Common and random amino acid substitutions are shown in red marked blocks here in all the 56 DEN-2 E/NS1 junction amino acid sequences.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#LC436677-Bangladesh [78
#AY496871-Bangladesh [78
#AY496872-Bangladesh [78
#AY496873-Bangladesh [78
#AY496874-Bangladesh [78
#AY496875-Bangladesh [78
#AY496878-Bangladesh [78
#AY496876-Bangladesh [78
#AY496877-Bangladesh [78
#FJ644564-India [78
#AY770511-India [78
#AY099336-Sri_Lanka [78
#AF317645-China [78
#AF029794-Malaysia [78
#AF029795-Malaysia [78
#AY766104-Singapore [78
#KJ737430-Thailand [78
#AY676353-Thailand [78
#DQ675520-Indonesia [78
#OK469353-Thailand [78
#MW946984-Thailand [78
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#AY679147-Brazil [78
#AY099337-Martinique [78
#EU482458-Vietnam [78
#GQ868629-Cambodia [78]
#AY744685-French_Polynesia [78]
#FJ882575-Mozambique [78]
#GU131954-Colombia [78]
#HQ166034-Nicaragua [78]
#FJ373304-Venezuela [78]
#GQ868616-Saint_Lucia [78]
#FJ547071-Puerto_Rico [78]
#KU050695-Philippines(prototype) ATG TCA TTT TCA TGC ATT GCG ATA GGA ATC ATT ACA CTC TAT CTG GGA GTC GTG GTG CAA GCT GAC ATG GGG TGT GTC [156]
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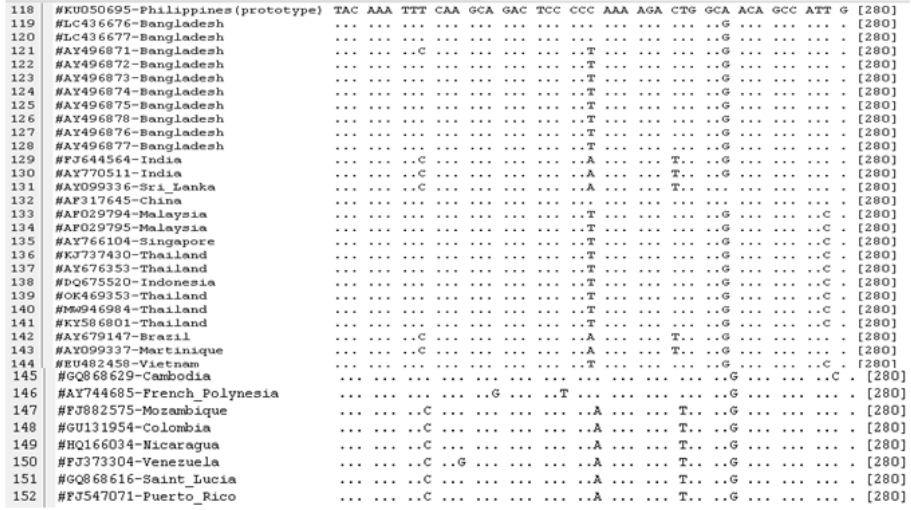
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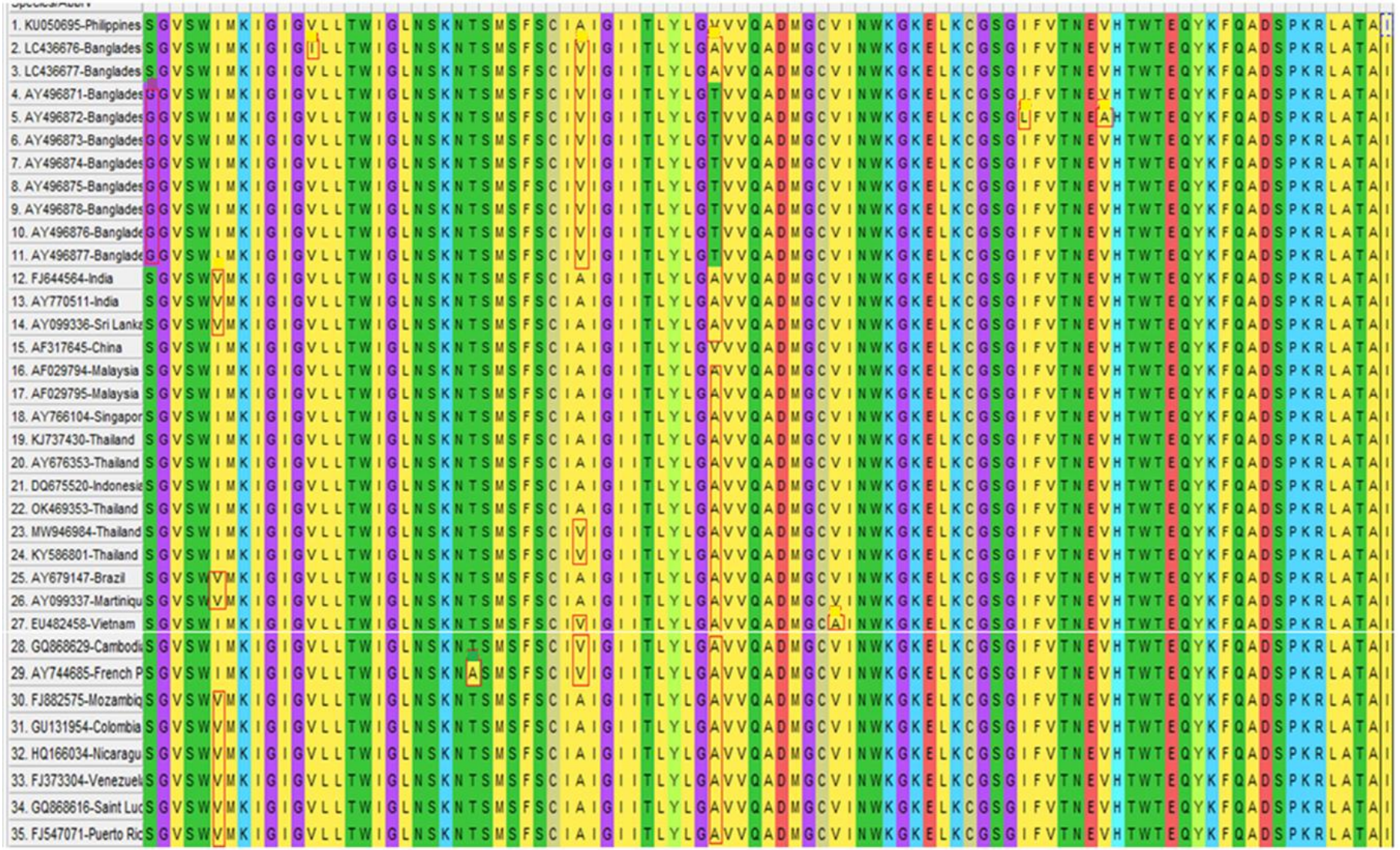

Supplementary Fig. 2. (A). DEN-3 E/NS1 nucleotide sequences of different geographical regions of the world obtained from GenBank and aligned in MEGA11 are shown here. **(B)** Common and random amino acid substitutions are shown in red marked blocks here in all the 56 DEN-3 E/NS1 junction amino acid sequences.