Stage 1: Classification Score each sequence with all models (HMMER3 shortened pipeline)

Model 1 (HMM)

RefSeq sequence Group: Norovirus and features Subgroup: IV

low HMM score

Model 2 (HMM)

RefSeq sequence Group: Dengue and features Subgroup: 1

input sequences:

highest HMM score

best-matching model used in remaining stages

Model N (HMM)

RefSeq sequence Group: NONE and features Subgroup: NONE

low HMM score