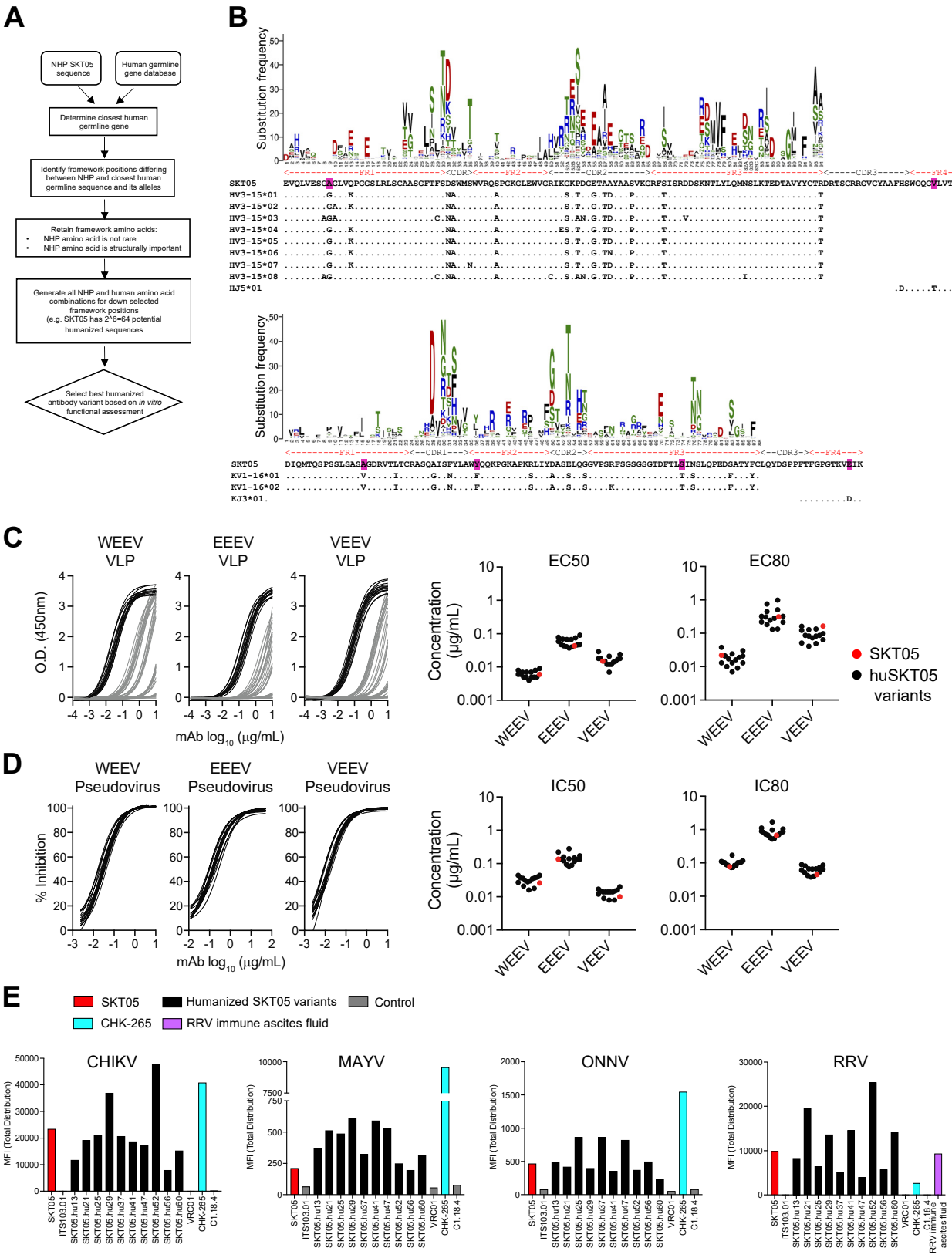
Figure S7


A
NHP SKT05 sequence
Human germline gene database
Determine closest human germline gene
Identify framework positions differing between NHP and closest human germline sequence and its alleles
Retain framework amino acids:
NHP amino acid is not rare
NHP amino acid is structurally important
Generate all NHP and human amino acid combinations for down-selected framework positions (e.g. SKT05 has 2^6=64 potential humanized sequences
Select best humanized antibody variant based on in vitro functional assessment
B
Substitution frequency
C
WEEV VLP
EEEV VLP
VEEV VLP
O.D. (450nm)
mAb log10 (µg/mL)
EC50
EC80
Concentration (µg/mL)
SKT05
huSKT05 variants
D
WEEV Pseudovirus
EEEV Pseudovirus
VEEV Pseudovirus
% Inhibition
IC50
IC80
E
SKT05
Humanized SKT05 variants
Control
CHK-265
RRV immune ascites fluid
CHIKV
MAYV
ONNV
RRV
MFI (Total Distribution)