

Table S1. Binding of mouse MAbs 1A1-D2 to mutant DENV3 EDIII proteins

Mutation	MAb 1A1-D2 Binding ¹
I301A	112.90
I301G	101.67
N302A	63.70
N302G	132.26
T303A	104.70
T303G	109.24
F304A²	17.31
K308A	13.28
E309A	78.55
V310A	21.71
E323G	118.07
K325A	32.61
K325G	26.14
G326A	14.80
E327A	63.22
D328A	16.07
A329G	45.19
P330A	16.24
T357A	92.80
T357G	77.53
K358G	86.87
E361G	49.49
I380G	99.17
D382G	64.42
K383A	85.78
K383G	86.01
K386A	60.02
K386G	47.75

¹ Binding to each mutant expressed as a percentage of binding to wild type EDIII protein from genotype II

² The values in bold indicate mutations that reduced MAb binding by >80% compared to the wild type EDIII