

Highly Thermotolerant SARS-CoV-2 Vaccine Elicits Neutralising Antibodies Against Delta and Omicron in Mice

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Supplementary Text A

Amino Acid Sequences of Vaccine Formulations

Vaccine 1/2: mRBD1-3.2 (Monomer)

EISNITNLCPFGEVFNATRFPSVYAWNRKRISNCVADWSVLYNSASFSTFKCYGVSP
TKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPPDFTGCVIAWNSNNLDS
KVGGNYNLYRLFRKSNLKPFRDISTEIQAGSTPCNGVEGFNCYFPLOSQYGFQPTN
GVGYQPYRVVLSFELLHAPATVCGCLKKSTNGSLEVLFO

Vaccine 3: mRBD1-3.2-beta (Monomer)

EISNITNLCPFGEVFNATRFPSVYAWNRKRISNCVADWSVLYNSASFSTFKCYGVSP
TKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGNIADYNYKLPPDFTGCVIAWNSNNLDS
KVGGNYNLYRLFRKSNLKPFRDISTEIQAGSTPCNGVKGFNCYFPLOSQYGFQPT
YGVGYQPYRVVLSFELLHAPATVCGCLKKSTNGSLEVLFO
(Red residues represent mutations relative to Wuhan-Hu-1)

Vaccine 4/5: hCMP-mRBD (Trimer)

EISEEDPCACESLVKFOAKVEGLLQALTRKLEAVSKRLAILENTVVASSEGTMMRGEL
KNITNLCPFGEVFNATRFASVYAWNRKRISNCVADYSVLYNSASFSTFKCYGVSP
TKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPPDFTGCVIAWNSNNLDSK
VGGNYNLYRLFRKSNLKPFRDISTEIQAGSTPCNGVEGFNCYFPLOSQYGFQPTNG
VGYQPYRVVLSFELLHAPATVCGPKKSTNGSLEVLFO
(Orange residues are hCMP; blue residues are the RBD)

Vaccine 6: mRBD-GlyIZ (Trimer)

EISITNLCPFGEVFNATRFASVYAWNRKRISNCVADYSVLYNSASFSTFKCYGVSP
TKLNDLCFTNVYADSFVIRGDEVQRQIAPGQTGKIADYNYKLPPDFTGCVIAWNSNNLDSK
VGGNYNLYRLFRKSNLKPFRDISTEIQAGSTPCNGVEGFNCYFPLOSQYGFQPTNG
VGYQPYRVVLSFELLHAPATVCGPKKSTNAGSGSGSGSAGSNGTGRMKQIEDK
IENITSKIYNITNEIARIKKLIGNRTAS
(Orange residues are GlyIZ; blue residues are the RBD)