Monoclonal Antibodies

Murine Monoclonal Antibody to the SARS Coronavirus (SARS CoV) Spike Protein

ANTIGEN USED FOR IMMUNIZATION

We used inactivated whole SARS CoV (coronavirus) as antigen (courtesy of Dr. Anton Andonov, National Microbiology Laboratory, Winnipeg, Canada).

METHOD OF IMMUNIZATION

For immunizations, 5–6-week-old female BALB/C mice were injected subcutaneously with 50 μg of inactivated SARS-CoV with an equal part of Complete Freund’s Adjuvant (CFA, H37 Ra; Difco), on day 1. On day 30 the mice received 50 μg of purified SARS-CoV in Incomplete Freund’s Adjuvant (IFA). On days 48 and 63, mice received 5 μg in IFA. The mice received a final booster injection with 5 μg of purified SARS virus 3 days prior to fusion. Mice were euthanised by anaesthesia overdose and exsanguinated by cardiac puncture. The spleens were excised under aseptic conditions.

PARENTAL CELL LINE USED FOR FUSION

P3X63 Ag8.653

SELECTION AND CLONING OF HYBRIDOMAS

Immunization of mice, removal of spleens, preparation of spleen and myeloma cells, fusion and screening for monoclonal antibody to SARS were performed according to NCFAD standard operating procedures under ISO17025. Hybridomas were cloned out in semisolid medium. Supernatants were screened via ELISA using purified virus as antigen. Isotyping was performed using a commercial dipstick test (Roche) according to the manufacturer’s instructions.

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SPECIFICITY

SARS-CoV spike protein

SOURCE

Murine

FORMAT/PURITY

Supernatants

IMMUNOGEN

Whole inactivated TOR-3 SARS CoV

ANTIGEN REACTIVITY

EIA, Western, IFA, IHC

APPLICATIONS

EIA, IHC, Western, IFA, cELISA, VN

METHOD OF IMMUNIZATION

s.q.
STORAGE

Frozen, –20

MEDIA

BD Cell Quantum Yield

AVAILABILITY

Supernatant  Yes ✓  No

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