Monoclonal Antibodies

F26G15: Murine Monoclonal Antibody to the SARS Coronavirus Nucleoprotein (SARS CoV)

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.

SPECIFICITY
Nucleoprotein

ISOTYPE
IgG2b/k

SOURCE
Murine

FORMAT/PURITY
Supernatants

IMMUNOGEN
Whole inactivated TOR-3 SARS CoV

ANTIGEN REACTIVITY
EIA, Western

APPLICATIONS
EIA, Western, cELISA

METHOD OF IMMUNIZATION
s.q.

STORAGE
Frozen, −20
MEDIA

BD Cell Quantum Yield

AVAILABILITY

Supernatant  Yes ✓  No

ADDRESS CORRESPONDENCE TO:

Dr. Jody D. Berry, Xin Yuan, Brigitte Nicolas, Fran Ranada, and Frank Plummer
The Monoclonal Antibody Section
National Centre for Foreign Animal Disease-CFIA
National Microbiology Laboratory–Health Canada
Reagent Development Unit
1015 Arlington St.
Winnipeg, MB, Canada
Telephone: 204-789-6063
Fax: 204-789-2038
E-mail: berryjd@inspection.gc.ca